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ABSTRACT

This report summarizes some of the thinking, data, problems and other factors affecting the field work of a 4-year study of preschool programs with aboriginal families in Victoria. The project aims included: (1) establishing positive communication with part-aboriginal families in Victoria, in order to understand what planned educational contributions might appropriately be made to families with young children; (2) developing tentative preschool programs which, while allowing such communication, would provide some immediate educational support and create bases for developing future work; (3) defining issues needing consideration in educational work with part-aboriginal adults and children, and trying to develop a frame of reference which would help resolve some of the current controversy surrounding experimental preschool programs; and (4) obtaining descriptive information relevant to these issues in education and psychological research. In addition, the emphasis of this report is a descriptive analysis of some current problems affecting progress with field work, such as: clarifying purposes and bases for action, selection and review of tests, teaching programs and field work problems, followup studies, and establishing guidelines for future action. (CS)

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EARLY EDUCATION PROGRAMS
and
ABORIGINAL FAMILIES IN VICTORIA

Report on the Bernard van Leer Foundation
Pre-school Project: Monash University
1969 - 1972

Phyllis M. Scott
Margaret Darbyshire

PS 007209

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FOREWORD

When the Van Leer Foundation indicated that it would support a pre-school project in Victoria, those involved welcomed the challenge. Now some five years later it is legitimate to ask what has been achieved and what has been learned. Dr. Scott has tried in this report to describe not only the development achieved by individual children but to analyse the nature of the educational problems faced by children and their parents, and to place these in the perspective of pre-school education. Her discussion of the difference between research and teaching programs, and her penetrating analyses of issues in existing intervention programs, stem from her concern with how one translates knowledge about development and learning into action in teaching and with research which generates data helpful in education. The report is thus not merely a statement of what occurred but also a discussion of basic problems of pre-school education, worked out in the new context of this project.

As Chairman of the Project Committee I must express my appreciation for the dedication to the task of Dr. Scott, Mrs. Darbyshire, Miss Considine and Miss Dean. To have seen the teachers at work with the children was to be reminded of how exciting learning can be. I am grateful to them for educating me about issues which I failed to perceive, or perceived at best vaguely, when the project began. I feel sure most of the children and their parents benefited from the project. I certainly did. Can a report such as this help us to think more clearly about appropriate ways of assisting with Aboriginal education, and about the educational issues involved in pre-school education for all children ? This long term benefit, if it is achieved, would be an appropriate reward for Dr. Scott.

S. S. Dunn

S.S. Dunn
Dean, Faculty of Education
Chairman, Van Leer Project
Planning Committee

PREFACE

Origin of project

In August, 1967, the Centre for Research into Aboriginal Affairs at Monash University arranged several days of seminars concerned with the education of Aboriginals. These brought together a wide variety of people, including Aboriginal delegates and representatives from all States, with contributions to make to this area of work. The content of seminar papers and discussions is recorded in the publication, Aborigines and Education (Dunn & Tatz, 1969).

A representative of the Bernard van Leer Foundation was also invited to attend these meetings. This Foundation, established in 1958, is interested to support projects which help to counteract the effects of negative environmental factors on children's development and intellectual progress. Its funds are derived entirely from shares in the Van Leer Group of Companies which has business interests in many countries, including Australia. Its policies give priority to projects in countries from which its income is derived, and to those initiating experimental field work which may then be developed by the country concerned.

Following the seminars at Monash University, the Foundation indicated interest in considering a proposal for educational work with Aboriginal families. It financed a period of exploratory planning in 1968, under the direction of Dr. Colin Tatz, then Director of the Centre for Research into Aboriginal Affairs. The Board of the Centre then requested the Faculty of Education to undertake planning and development of the project and a project committee was established. (This committee has taken responsibility for administrative matters. Plans for educational activities, however, have been made directly with each Aboriginal family participating.)

Project Planning Committee

Chairman: Professor S.S. Dunn, Dean, Faculty of Education,
Monash University

Members: Mr. M.R. Worthy, Director, Ministry of Aboriginal
Affairs, Victoria.

Dr. Mary C. Nixon, Senior Lecturer in Psychology,
Faculty of Education, Monash University.

Mrs. Margaret Darbyshire, Psychologist.

Dr. Phyllis M. Scott, Research Fellow,
Faculty of Education, Monash University.

Representative: Centre for Research into Aboriginal
Affairs, Monash University.
(Initially Dr. Colin Tatz:
later Dr. Elizabeth Eggleston.)

Early Planning

In the formulation of the project, the following people assisted the Planning Committee in an advisory capacity: Aboriginal representatives - Miss D. Charles; Mrs. B. Nicholls. Representatives of related fields of professional work - Mr. L. Emerson; Dr. I. Findlay; Mr. A. Grey; Miss E. Stubbs; Dr. E. Wilmot. In addition, early contacts with Aboriginal families and exploratory discussion with the Aboriginal Assembly in the area under consideration for initiating work indicated an interest and willingness to work with University project staff, in developing an education program for pre-school children and their parents.

Financial Support

The Van Leer Foundation accepted a proposal for a three-year pre-school project to start in January, 1969. This was extended later to a fourth year of work. The Foundation has carried the major financial responsibility for this project. This contribution has made it possible to initiate pre-school programs with Aboriginal families in Victoria, to study the outcome carefully and to share something of the thinking, experience and information resulting from four years' work through the preparation of this report. We would like to express here our sincere thanks to the Foundation for its support for this experimental work in Victoria; also to assure it of our continuing interest in the further development of the work initiated under its auspices.

The Ministry of Aboriginal Affairs, Victoria, has also carried a significant share of financial responsibility, increasing this throughout the project until, in the final year, the full salaries of the two pre-school teachers employed are provided from Ministry funds. Again, this financial support is acknowledged with appreciation.

Summary of Project Aims

1) establishing positive communication with part-Aboriginal families in Victoria, in order to understand what planned educational contributions might appropriately be made to families with young children

2) developing tentative pre-school programs which, while allowing such communication, would provide some immediate educational support and create bases for developing future work

3) defining issues needing consideration in educational work with part-Aboriginal adults and children, and so trying to develop a frame of reference which would help resolve some of the current controversy surrounding experimental pre-school programs

4) obtaining descriptive information relevant to these issues in education and psychological research

Field Staff

Project Co-ordinator:	Dr. Phyllis M. Scott (Half-time)
Psychologist:	Mrs. Margaret Darbyshire (Two-fifths time)
Teachers:	Miss I.M. Dean (Full-time): Swan Hill program. Miss M. Considine (Full-time): Metropolitan program.

Work Sequence

1968:	Initial planning.
1969:	Swan Hill pre-school program initiated by Project Co-ordinator (Feb., 1969) Initial psychological tests: Swan Hill (Oct. - Nov., 1969)
1970:	Metropolitan program initiated (March, 1970) Two full-time teachers appointed to develop programs. Initial psychological tests: Metropolitan (June, 1970) Repeat " " : Swan Hill (Sept. & Nov., 1970)
1971:	Teaching programs maintained. Initial and repeat testing: Swan Hill (Oct., 1971) " " " " : Metropolitan (June-July, 1971)
1972:	Teaching programs maintained. Follow-up contacts with schools initiated. Exploratory planning for maintaining field work undertaken. Project report prepared. Project to be terminated: Dec., 1972.

Purpose and Nature of Report

The main objects of this report are to bring the thinking, data and practical experience of this project to bear on issues needing attention in educational work with Aboriginal families; and to report what it has been possible to achieve in field work during the period of the project. Only as our exploratory work draws to a close can either of these be done.

Describing the activities of the project as such, as though they should be reproduced elsewhere, makes little contribution to work in other situations. For one thing, our activities have been directed at answering questions about specific groups; at exploring concrete possibilities in two particular settings; and at gaining some much-needed experience. They do not represent some set way of teaching to be tested, demonstrated, or replicated. Activities have been heavily influenced by the varied circumstances and concerns of individual families and of the children participating, and by what each home is already contributing to the children's development. (These would be necessary characteristics of any other adequate program.) A variety of practical matters, too, in both field and University, as well as the experience of the teachers employed, have affected the amount and range of work which it has been possible or useful to undertake.

Project activities do not, therefore, represent a model to be imitated in future. There appears to be much imitative activity on pre-school issues at present; sometimes it seems that the main questions asked are merely which activity model should be selected, or whether we need to try out yet another! Few criteria are presented for selection, and often the models are not comparable, serving quite different, even unspecified purposes.

So, we have not reported activities as the project proceeded, as though in themselves they had some constant value, or allowed evaluation of the project. Instead, we wish to report what we have learned from some exploratory activities which helps with making decisions on the major questions one faces in educational work with Aboriginal families.

In order to do this one needs a conceptual framework which allows one to describe the educational and cultural ingredients, not the outward form , of practical activities. Current discussion in the educational literature appears to lack such a framework for discussion of experimental pre-school programs.

A functional definition of pre-school education which can be generalized to new situations, while retaining an individualized approach to teaching, is also needed. Making progress with this area of work is the task of another project being undertaken by the Project Coordinator. Bringing something of the thinking from this to bear on this project will, hopefully, allow a start in this direction, and help to reduce some existing communication problems. The program of work involved is being developed in collaboration with the Melbourne Lady Gowrie Child Centre, as funds can be found to take work a stage further. Part-time grants to date from the Creswick Foundation, the Department of Education and Science, and the Buckland Foundation have all helped, in various ways, with the background to this project.

Format of Report

It has proved impossible under half-time funding to present all available information or to discuss all aspects of work in a written report, while continuing involvement in and administration of field work. If it is possible to continue the study and evaluative aspects of work in Victoria, it is hoped to prepare further working papers.

The following outline indicates the emphasis in this report. In any future ones, it may be more possible to take up specific teaching questions, or to add to information which might help in understanding the circumstances in which Aboriginal families in Victoria are living, as these affect educational change. Here, it has been necessary to concentrate on the general nature of work, on establishing a framework for communication on pre-school education, and on trying to express some current problems, affecting progress with field work.

Sections	I - II	Clarifying purposes and bases for action
"	III	Initial field work: establishing communication
"	IV	Selection and review of tests; initial test and observational data on children
"	V	Teaching programs and field work problems
"	VI	Changes evident on re-testing children
"	VII	School follow-up study
"	VIII	Guidelines for future action

Joint Authorship

In preparing the various papers collected in this report, responsibility for authorship has been shared as follows.

Sociological background (1.2-1.4); Cultural difference or deficit? (4.2); Selection and review of tests (9.2) ; Initial test data (10.2-10.6); assistance with editing: M. Darbyshire

Other chapters, figures and tables, and general planning and editing of the report: P. Scott

This report intentionally emphasizes some of the thinking behind field work, and this means that readers may find that some re-orientation to the purpose of such a report is needed. But since the literature on experimental pre-school programs reflects some imbalance between study and action, it seems that communicating something of the background to the field work reported is important, if the project is to be useful.

No claim is made for having ready-made answers. What we hope for is to set a framework for dialogue which allows resolution of unnecessary confusions and divided efforts.

Publicity

At the outset of work in both programs undertaken, some parents asked whether participation in a pre-school program would bring publicity, photographers, and a general spotlight on the families involved. Previously, some had experienced unpleasant forms of this: for example, the humiliation of having oneself and family setting presented photographically as an illustration of the need for funds to support work with Aboriginals. Individual parents expressed a wish to "get on with things" without such attention.

In the opinion of project staff, those in need of assistance of one kind or another, for reasons outside their control, have the same right to privacy in their attempts to solve personal and family problems as that expected by the rest of the community. So we reassured parents on this matter, and have consequently gone about this project as unobtrusively as possible.

Because of professional and general interest in work of this nature, the involvement of the University, and the need for allocations of public funds, it has not been easy to maintain this working agreement. In addition, the form of the project has set restrictions on communication. For instance, when teachers work in children's homes, at the invitation of their parents, they are not at liberty to invite either professional colleagues or interested public to observe the pre-school program.

The continuation of support, financial and otherwise, with minimal publicity, is therefore appreciated; for as long as community assistance to those with particular needs arises from political or charitable motives in either white or Aboriginal Australians, or is a source of special gratification, the equality of those involved would seem to remain in some doubt.

On the other hand, the importance of the community being responsibly involved and informed on progress with social and educational matters, and on the use of Government funds, is acknowledged. It is hoped that this report will provide such information and set a context for thoughtful discussion of future directions for effort.

Terminology

In official reports concerning Aboriginals, it is usual to distinguish between "full-blood" and "part-Aboriginal" since the experience, current situation, and needs of these two groups differ in some major respects. Also, it is understood that the distinction is important to full-blood Aboriginals.

For the purposes of an educational report, however, it should be clear that the issue here is not one of purity of racial inheritance, but one of how Aboriginal families wish to live in relation to the rest of the Australian population.

In Victoria, there are no groups of Aboriginals continuing a traditional existence, although elements of this remain. Families of Aboriginal descent in this State are, therefore, referred to in this report by the one term, "Aboriginal", except where there is a particular need to differentiate groups of Aboriginal Australians, or in the presentation of statistical data from which comparisons may be made.

Acknowledgements

In addition to recording the financial support of the Bernard van Leer Foundation, I would like to express to the Executive Director, Mr. W.H. Welling, appreciation of the opportunity to work with the Foundation, and of the interest shown by its visiting representatives in the development of work in Victoria.

In the changing scene in which this project has been set, its administrative aspects have made constant demands on the time and understanding help of the Chairman of the Planning Committee, Professor Dunn. He has given much thought to the role which a University can play in a community service as well as a research function, has kept conversant with the development of field work, and has given time and professional help generously during the preparation of this report. To him, to Mr. Worthy, and to other members of the Planning Committee, I would like to convey my thanks for their guidance throughout the project. The interest shown by the Commonwealth Office of Aboriginal Affairs, through Mr. B. Dexter and Mrs. A. Somers(as well as the funds received through the State Ministry) has also been a source of encouragement to project staff.

As well as financial contributions, the Ministry of Aboriginal Affairs, through the Director, Mr. Worthy, made it possible to use Wandarrah, Swan Hill, as a headquarters for the pre-school program from 1969-1972, making the necessary building adjustments and providing some basic furniture. This practical help is acknowledged with appreciation.

Among the many others who have played some part in this exploratory work, special mention should be made of the following: Mr. J. Hullick (Education Officer) and Mr. F. Stewart (Aboriginal Liaison Officer) at Wandarrah, who shared their understanding with project staff and gave generous support to the pre-school program; also members of the Aboriginal Assembly who made us feel welcome and gave us the privilege of attending their meetings: the Directors of local pre-school centres and the various public services and agencies who worked cooperatively with project teachers in the interests of Aboriginal families: Dr. I. Findlay who carried out some initial medical examinations in the Swan Hill program: Mr. F. Rouch (Officer-in-Charge) and staff of the Coburg Branch of the Psychology and Guidance Section, Department of Education, who gave preparatory advice and practical help in obtaining school follow-up data; this and the interest and cooperation of school personnel made it possible to include some indication of children's school progress in this report.

Mrs. Darbyshire, as project psychologist, has given much from her theoretical knowledge, practical experience and personal time to this project. In spite of many problems arising from the nature of work found to be possible, she has worked exactingly and with much sensitivity to the parents and children involved, to obtain valid test data and to produce useful analyses.

Project teachers have carried the greatest load in developing field work. Conflicting demands from administrative, academic and practical aspects of this project have made it impossible, as Project Coordinator, to share the practical responsibilities of field work with them, as much as was intended. In spite of conditions which were intensely demanding in both personal and professional terms, the special qualities of their contributions are reflected in the warmth with which they have been

accepted by parents and enjoyed by children; in the extent of change towards educational goals in the children themselves; in invitations from the families involved to maintain current teaching contacts; and in the way in which they have entered into other activities of the communities in which pre-school programs have been set. I have enjoyed the opportunity to work with Miss Considine and Miss Dean, and with Mrs. Darbyshire, and have learned much from their insights and their sharing of the experiences of this project.

In this report, the limitations and the uncertainties of our field work will be evident. The responsibilities inherent in the Van Leer Foundation grant - those of developing and studying initial education programs was a very different one than that of obtaining research data for possible use in future by others. Attention is sought, through this report, for problems which have broad implications, yet which basically affect educational work. This is done from the viewpoint that responsibility for the existence of these problems rests with the whole community, and that their implications need to be widely known; also with some first-hand experience of the very real difficulties and pressures attached to the task of making progress. Whether or not problems are reduced, however, will depend for a start on acknowledging their existence, and then on giving thought to the vital overlap between professional decisions in education and political policies.

The families, both Aboriginal and non-Aboriginal, who have become our friends through field work, have our respect, affection, appreciation and concern. In trusting us with something of their thinking, their feeling, and their experience, they have given us an educational experience of exceedingly vivid impact - enjoyable, painful in the awareness created, thought-stretching - and one which all of us value highly. Whatever the practical outcome of this project, this will continue to activate the search for increased understanding of our own responsibilities to Aboriginal Australians and to all families with young children, and for ways of translating this into action.

Phyllis M. Scott

Phyllis M. Scott
Project Coordinator

September, 1973

SECTION I: STARTING POINTS

Introduction

A University obtains a grant for a pre-school education project with Aboriginal children and parents. Their families are scattered throughout the State, in a variety of social and economic circumstances. To the majority, a University is far from the context of their daily lives; to some it has no physical reality. For many Aborigines, it seems, the white population in general is experienced as a source of discomfort and anxiety, a majority group in possession of power but not necessarily of understanding of the personal and cultural problems which Aborigines face today. With educational differences as one probable reason for stress in relationships with other Australians, how can Aborigines meet, with any strongly positive feeling, those who have had considerable educational advantages for operating successfully in the majority culture?

The task, however, of bringing University resources and Aborigines into constructive interaction is the basic responsibility of the Monash University Bernard van Leer project. Until and unless this is accomplished, the concerns which prompted the acceptance of funds cannot be translated into concrete and appropriate directions for effort and activities which are mutually meaningful; nor can a University be sure that its efforts are based on the realities of the situation, and acceptable to Aborigines themselves. For, in general, the white population of this country has had - and has sought - little contact with Aboriginal Australians.

In these circumstances, one can only start with questions. Accepting funds for initiating educational work with Aborigines is appropriate only at the general level of awareness that some form of educational support is needed, and certain professional skills may be relevant. Beyond that it is paradoxical since, when faced with the task of providing such support, one finds oneself uneducated in respect to knowledge of the particular problems - educational or other - which Aborigines face in their current lives. Remedial action, however urgent it appears, may be destructive rather than helpful if it precedes thought for the issues involved and understanding of their meaning for the people involved; if it occurs in isolation from some overall approach to interacting problems; and most particularly, if involvement in such work is seen as an avenue for increasing status, political or academic. Unfortunately, the recently burgeoning interest in the pre-school education of minority groups throughout the world appears not to have been free from such components.

For this experimental pre-school project there were, therefore, some prerequisites to field work. The starting point was not the now familiar blanket assumption of group disadvantagement, supported by selected hypotheses regarding the educational effectiveness of specified intervention procedures. This assumes that the work to be done is known, and the main problem is how to do it. Instead, there was awareness that the education of *both* Aboriginal and non-Aboriginal Australians had not equipped them for the positive interaction across cultural boundaries which would allow understanding of educational needs. A focus on creating an opportunity for interaction, for listening and perceiving and some initial social learning on both sides was necessary. Thinking and communication about education might then be responsive to the plea of Aborigines themselves: to be known and treated as individuals - individuals representing a minority group with common concerns and interests, but still people with individual needs and personal contributions, and representing a variety of sub-cultures.* On this basis, educational activities could proceed tentatively, to the extent that the necessary communication was established, information was available and some common purposes existed.

It is, in fact, an accepted principle of the established field of Australian pre-school education that useful programs of educational activity are built on actual study of the progress and needs of particular groups and individuals; on some understanding of the existing contribution of each family to the education of its children; and on an awareness of the nature of the social community in which these families live. A general lack of experience in work with Aboriginal families indeed highlights the need to adhere to the principle, applying it even to the actual organization of teacher-family contact. Neither the usual concept of a pre-school centre, the experimental research-oriented pre-school program, nor an approach which left the matter entirely in the hands of the Aboriginal community, appeared, on first thoughts, to solve the educational situation.

But starting with questions about programs is useless. What, actually, were these various methods of education intended to achieve?

Chapter 1 WHAT IS THE EDUCATIONAL PROBLEM ?

1.1 Alternative starting points for thinking

Thought for the educational situation of Aboriginal children in Victoria is relatively recent in educational planning. Now, however, there is increasing awareness of, and concern for, the learning difficulties apparently experienced by Aboriginal children throughout formal schooling. These have been reported early in school attendance, and are seen to have a cumulative effect.

A recent study sponsored by the Australian Council for Educational Research and funded by the Ministry of Aboriginal Affairs, Victoria, (Bruce, Hengeveld and Radford, 1971) documents differences between Aboriginal, migrant and other school-age Australian children on psychological tests considered relevant to academic progress. Even in early primary school grades, children of parents who identify themselves as Aboriginal were reported to have made significantly less progress in some aspects of the language development necessary for learning in school.

Although the results showed no consistent picture of significantly lower performance by Aboriginal children at all ages or grades (p.25), the investigators considered that specific findings were in tune with the widely accepted view that educational deficits existed and were likely to have a cumulative effect. Such early learning difficulties are frequently assumed to be the basic cause of the high percentage of Aboriginal children not completing secondary education; of later employment problems and associated economic instability; and of limited access to community resources. This combined chain of events is then seen to prevent full and equal participation by Aborigines in the Australian community.

---

*Informal communication from Aboriginal delegates to ABSCHOL Conference, Univ. of N.S.W., Feb., 1971.

Concern to improve this situation is expressed in a report of The National Workshop on Aboriginal Education: priorities for action and research (Watts, 1971). It reads:

> "The workshop recognized from the outset that the educational experience of most Aboriginal Australians is one of almost continuous failure, leading to withdrawal from and ultimate rejection of the school and what it has to offer. There are exceptions to this, however, and the general position is showing gradual improvement. Acknowledging this, and noting that Aborigines for a variety of reasons appear to be at a marked disadvantage educationally, compared with most other Australians, the Workshop espoused the view that special consideration should be given to the educational needs of Aborigines." (p.ii)

At this point it is necessary to raise a very basic question: Is the problem for education that of finding more effective ways of helping children (Aboriginal and other) cope with the requirements of an institutionalized education system, devised to meet the past (unstated) purposes of one particular cultural group?

Or is the problem to define what education is needed if intelligent living is seen to include the ability of Aboriginal and European Australians to co-exist with mutual respect, and with areas of both positive interaction and of cultural independence?

In the first case, the educational problem is largely one of method; objectives remain vague and internal to the system; their educational content and contribution to another cultural group is not open to discussion. While there may be some serious questions to examine here, the more immediate problem is that taking such a position automatically expresses disinterest in listening to the concerns, values, and practical needs of a minority group. It is not permissible to raise questions about the cultural relevance of educational activities; they are assumed to have a constant value. Perhaps there is fear that any needed revisions would involve massive reorganization of facilities and resources rather than flexibility in people's minds?

In the second instance, the problem extends to examining educational purposes and the content of what is to be learned. If these are appropriate, some problems of method may just disappear and solutions to others become clearer. The frame of reference for discussion and decision-making is distinctly different in each case. The extent of overlap in what would be taught between these alternative ways of defining responsibilities to Aboriginal children has not received careful examination.

Whether increased academic success would reduce or increase the social problems of Aboriginal adults, and whether such comparative success is a basic educational issue, are matters open to question. There seems no clear evidence in everyday life that the existing educational advantages of the white Australian population have helped resolve its social problems as they have those affecting technological progress; or that the progress of these two are necessarily related.

If one is not careful, the "educational" problem underlying action tends to be that of the majority group, of those who operate the current system. Concern for children in educational difficulty has an artificial flavour if it comes from those who may be responsible for creating the conditions in which such difficulties arise. It seems essential in planning, therefore, to draw a careful distinction between concern for those problems faced by children as a result of exposure to an existing system of education, and concern for how appropriate education may help Aborigines towards increased independence. These alternative starting points for thinking do not necessarily lead to altogether opposite content, but resources and policies geared to the first may still leave untouched basic educational issues, of which failure in school grades may be merely symptomatic. This may waste valuable time and finance.

On grounds that the educational objectives of teaching should be determined independently from the social consequences of success or failure in coping with the requirements of any existing education system, we considered that, for this pre-school project, any reduction of differences in school progress should be an expected result of work, rather than an end in itself - that is, to the extent that the requirements were supportable on cultural and educational grounds.

Accepting, then, the concern that education provides a tool for Aborigines, and does not mean just one more set of problems making demands upon them, one must ask what tools are useful. Relative cultural positions of Aboriginal and non-Aboriginal populations need to be examined openly. Then, the role of education in relation to these can be studied, and specially planned programs have some clear sense of direction.

A summary statement of the general situation, and some information on the position of part-Aborigines in Victoria, follow in the next section for the information of those who have not had an opportunity to become conversant with the situation.

1.2 The identity and status of Aborigines as an ethnic group

Many Aborigines are readily distinguished as physically 'different' from the majority of the population. This is dramatically the case with 'full-blood' Aborigines but also holds for a large proportion of part-Aborigines who show this perceptual 'figure-ground' relationship to the European majority in the centres where they live. In urban centres where there is a growing population of Southern-European migrants this perceptual distinctiveness is likely to decrease. However, not only do Aborigines share a distinct ethnic identity in relation to the predominantly European community; they also share a low status in this relationship. The determinants of this low status are not merely socio-economic: for example, low earning power resulting from limited education and skills may be compounded by a 'dependency' relation to a reserve, mission, or station where Aborigines reside, or by prejudice in the general community. Our forefathers vindicated their inhuman and in some cases 'genocidal' treatment of the original inhabitants of this country on the basis of an assumed gross inferiority of their culture in relation to European culture, and of their racial characteristics as being more primitive in 'evolutionary' development than those of Europeans. A significant residue of these historical 'values' underlies contemporary attitudes to Aborigines (Rowley, 1970).

Historically, we denigrated their original cultural heritage and way of life, at the same time denying Aborigines the opportunity to achieve status in our own. This was accomplished both by decimation and by residentially segregating them from the mainstream of development in coastal south-eastern areas, leaving them to subsist in inner arid and northern tropical areas which have remained, till very recently, economically non-viable. At no time has the colonizing power resolved the issues arising from conquest. Thus the ethnic group identity of Aborigines in relation to the ethnic majority of the community has been and has remained, with few exceptions, one with a chiefly negative value.

1.3 The situation of Aborigines in Victoria

On a number of dimensions, such as size, composition and residential distribution, the part-Aboriginal population of Victoria has some distinctive features which set it apart, to some degree, from that of other States of the Commonwealth. There is, it would seem, a somewhat different sociological context for educational planning.

Size and composition. In 1970 the Aboriginal population of Victoria was approximately six thousand and was made up entirely of part-Aborigines. While in size it most closely approximates that of South Australia (approx. 8,000), in composition the Victorian population is dramatically different, as nearly half the South Australian Aboriginal population is full-blood. On the other hand, though New South Wales has a negligible number of full-bloods, its part-Aboriginal population is five times as large as that of Victoria. Western Australia and the Northern Territory have total populations of Aborigines very similar to N.S.W., but in these States the full blood population is a significant feature - in Western Australia more than two-fifths of the total and in the Northern Territory four-fifths of the total. Queensland, on the other hand, with the largest population of Aborigines - 10 times that of Victoria - has only one-fifth full-blood. (No accurate figures are available; these are estimates only from the 1966 Commonwealth Census and the 1969 Department of Labour and National Service, Labour Market Studies: Number 1: Aborigines.)

When account is taken of the density of overall populations in the various States, it can be seen that in Victoria the part-Aboriginal population represents a very small percentage, even compared to N.S.W., which has somewhat similar demographic features. It certainly lacks any perceptual 'saliency' as a group, and this has been further reduced, at least in the metropolitan area, by the high proportion of persons from Southern Europe in our recent migrant influx.*

For the Commonwealth as a whole, the residential distribution of Aborigines is distinctly different on the rural/urban dimension from that of the European population. Sixty-five per cent of the total Australian population live in towns and cities of over 50,000 inhabitants, but less than 25 per cent of the Aboriginal population is so located (Stevens, 1970, p.391).

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*That this has had significant implications for the part-Aboriginal population was highlighted during a seminar held in Melbourne in 1969, in which part-Aboriginal adolescents were discussing their problems. One young part-Aboriginal girl remarked that she looked much like the rest of her classmates!

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This residential location of a significant proportion of the Aboriginal population in rural and often remote areas would seem to have played (and to continue to play) an important role in determining their economic position and directly and indirectly their depressed housing, health and educational standards. While, under their traditional subsistence economy of hunting and gathering, many Aboriginal tribes were able to maintain their viability in such areas, the 'market' economy which white settlement has increasingly imposed on land use throughout Australia has virtually destroyed that viability and created an economically dependent relationship on the part of Aborigines to the economic system of the Europeans. Within that system Aborigines have had almost no opportunity to become employers or self-employed (as are 40% of European rural males) since they have lacked the appropriate resources in capital and in skills. At the same time their restricted employment opportunities, till very recently, have left them vulnerable to exploitation. For example, in the Northern Territory, pastoralists have refused to acknowledge the actual skilled contribution to the industry of Aboriginal labour, in order to keep wages down (Berndt, 1948).

Thus the economic insecurity, which Stevens (1970) claims remains the main barrier to social equality of Aboriginal people in the Australian community, would seem critically related to their 'residential locale.' For the majority of Aborigines, living as they do in rural as distinct from urban Australia, planned programs for the independent economic development of the adult Aboriginal communities, of necessity, claim a high priority. Without such a framework, attempts to upgrade housing, health and educational standards are likely to remain sporadic and in the long-run ineffectual, even consolidating the dependent, often parasitical relationship to the European community. 'Land Rights for Aborigines' may be seen as an issue, not just of cultural, but of economic viability.

This discrepancy in residential distribution with its accompanying effects does not seem to hold, however, for the State of Victoria. In 1966, 85 per cent of the population of Victoria was living in urban centres of more than 1,000 persons (Clarke, 1970). Currently, it has been estimated that some 80 per cent of Victorian part-Aborigines are similarly distributed (calculated from figures supplied by the Research Officer for the Ministry of Aboriginal Affairs - approximately 700 out of the total of 5,250 not living in such centres.) In Victoria the main difference between the distribution of Europeans and part-Aborigines is in the proportions residing in the Metropolis - 70 per cent (approximately) of Europeans, but only 27 per cent of Aborigines.

Only a very small proportion, then, of this State's part-Aboriginal population is currently living in areas segregated from European settlement. The majority are now housed alongside European families in somewhat comparable circumstances, although most commonly, as tenants rather than home-owners. That this residential distribution of Aborigines has some critical implications for their overall advancement is highlighted by Stevens' conclusion that until Aboriginal domestic circumstances are brought into line with those enjoyed by other Australians, "Aborigines have little chance of changing their status as an under-privileged socially and educationally deprived group." (Stevens, 1970, p. 405). In Victoria, it is only in the East Gippsland area that any 'group' of Aborigines (some 600, strung at points along the highway), as distinct from individual households, lack this basic 'comparability' and there conditions reflect in part the generally depressed state of this area. This would seem to bear out Rowley's (1970) conclusion that factors facilitating urbanization may help to strengthen economic power.

The differential between the level of housing, health and education of Aborigines and that of the European population would appear to be smaller in Victoria than that which obtains in other States. General data on health are not available but, as far as infant mortality is concerned, the N.S.W. figures for its part-Aboriginal population, grossly discrepant from European rates, apparently did not hold for Victoria (Moodie, 1969, p.184). Again, there is not the marked, and in some States, enormous, discrepancy in the ratio of secondary to primary level enrolments of the Aboriginal child population. This has been calculated from the figures quoted in Aboriginal Education - present facilities and needs (Tatz, 1969). The data from which the ratios have been calculated was for the year 1966-67. Nation-wide data for all children were not available. It was possible to obtain figures for Victoria for February, 1967. From these it was calculated that the proportion of children enrolled at secondary schools compared to primary school enrolments was 1:1.7 which provides a crude yard-stick or base line for assessing the proportions for Aboriginal children set out below.

Proportions of Secondary to Primary School Enrolments for
Aboriginal Children in different States

Northern Territory	1 : 644 *	
South Australia	1 : 9	(approx.)
West Australia	1 : 8	(")
Queensland	1 : 6	(")
New South Wales	1 : 5	(")
Victoria	1 : 2	(")

* The figures for the Northern Territory are illuminating in view of the different organization of educational services there. "The majority (of Aboriginal children) are subjected to standards uniquely applicable to the Education Section of the Social Welfare Branch" (Stevens, 1970, p.40).

The ratio for Victoria becomes more discrepant, however, at higher levels of the secondary school and, consequently, is most marked at post-secondary and tertiary levels. This holding or drop-out pattern, however, is shown by other low socio-economic status and/or rural groups both in Victoria and elsewhere in the Commonwealth. Closure of the 'housing-gap' is also almost in sight in Victoria.

No small amount of credit for achievement of these decreased differentials is due to the vigorous work of a re-organized Department of Aboriginal Affairs since the appointment of a new Director for this State in 1968. However, some basis would seem to have been provided by the over-all economic development within the State and the size, composition and distribution of the Aboriginal population itself. It seems unlikely that the selective migration of Aboriginal families with any special characteristics has played any major role. Victorian part-Aborigines live in the most "settled" part of what Professor Rowley has termed "settled" Australia, and their living conditions here largely reflect this residential distribution.

1.4 Commentary

The available evidence of different conditions of life of Aboriginals in different parts of the Commonwealth suggests that the chief obstacles to their joining the mainstream of European development (if they so 'choose') lie, in a sense, outside the characteristics of the Aboriginal people themselves and outside their control. The grossly depressed level of Aboriginal housing, health and educational standards in many areas of the continent would seem largely to reflect their level of association with, and access to, those conditions of life and facilities of the European community which sets these standards, rather than an inability to reach or a rejection of such standards on the part of Aborigines.

Further, demonstrable lack of high educational and occupational skills of the majority of the Aboriginal population cannnot be shown to be the chief barrier to their economic and social advancement nor can their reputed lack of appropriate motivations. To the extent that Melbourne can be taken as an index of employment conditions in Southern States, low skill under the then present economic conditions (1966) was not found to be a significant factor causing poverty (Henderson et al, 1970.) This Melbourne poverty study found two thirds of Italian and Greek migrants to be unskilled, but with little unemployment incidence, and hardly any families headed by a male bread-winner in regular employment to be poor - the only exceptions being some large families and some migrants affected by exorbitant housing costs.

Attempts to upgrade the educational and occupational skills of Aboriginal children and youth can only have an impact on the status of the future Aboriginal population. Meanwhile, a great deal can and must be done to improve the general status and living conditions of a present generation of Aboriginal adults. For those who wish to move into urban complexes (and, under present conditions in the rural sector of the economy, this is likely to represent increasing numbers of rural dwellers both European and Aboriginal) planned programs of adult education and welfare are likely to be needed to relieve the 'transitional' stresses of 'in-migration.' For those who wish to remain on settlements and reserves, imaginative and extensive, well-financed community development programs will need to be created if such communities are ever to achieve an independent, economically viable existence in such areas. Without such an overall, two-pronged attack on the problems of the Aboriginal adult population, educational programs directed at their children are unlikely to effect long-term gains and could create dislocations in the relationship between the two generations.

At the same time, even such multi-faceted, carefully planned programs for the population may well fail to effect their goals unless attention and effort are directed to the serious problem that resides in the European population. Rowley (1970) sees the prejudice expressed in the myth of white Australia as the basic problem: "Color prejudice has so overwhelmingly dominated the value system as to restrict the opportunities of dark-skinned persons, irrespective of ability, while opening the way more easily for those of fair coloration." Probably because of the lack of saliency of the Aboriginal population in this State, we, in Victoria seriously underestimate the existence of such prejudices and of the operation of devaluing stereotypes of the Aboriginal people - while they certainly occur here, they are likely to be given more blatant and frequent expression in "colonial" as against "settled" Australia.

Till recently it has been only the Aboriginal population which has attempted any solution to this problem. This they have done by deferring to such prejudices and, for some, such deference has meant engaging in sustained endeavours to be as much like Europeans as possible in order to reduce its expression. While it can be shown that color prejudice creates manifold problems for the Aborigines themselves - even to the extent of distorting 'objective' investigations into such areas as their health, housing and education - it is only the European matrix society itself which is in a position to tackle the problem of its own prejudices. This it must undertake through its own institutions - through the legal system, the education system and so on and through the channels of mass media communication. It is not possible to turn back the clock of white settlement in Australia. However the current "zeitgeist" of environmental concern would seem to offer a more favorable climate of opinion for modifying the position of cultural arrogance assumed by successive generations of white settlers towards the indigenous nomadic culture of the Aborigines, which settlement so effectively destroyed.

Only when their own origins are accorded their rightful value can Aboriginal or part-Aboriginal people take their place in a, hopefully, multi-racial society. Unless changes in the white matrix society can be wrought so that this becomes a possibility, early education programs and improved educational opportunities could further increase tensions and frustrations within the Aboriginal population rather than lead to their reduction.

Notes: Both Professor Rowley's book and the recently published study of 'Aboriginal school' (N.S.W. Teachers' Federation, 1970), reviewing the current underachievement and drop-out phenomenon exhibited by Aboriginal youth, underline 'color prejudice' and discrimination as a basic cause.

The N.S.W. Teachers' Federation report stresses that despite the value of the various educational measures they recommend, such steps "could do nothing to overcome the lack of employment, housing, poor health and the various forms of discrimination which are the basic cause for the failure of Aboriginal children to achieve their full potential." Rowley (1970) also claims that an important determinant of school drop-out is the realization by the Aboriginal adolescent that "for the person who cannot 'pass' there is nothing in Australian society but unskilled work and membership of a socially depressed caste." Similar observations have been made regarding Negro and Indian adolescents in the United States.

Chapter 2 CONTRASTING APPROACHES IN PRE-SCHOOL PROGRAMS

Whatever the relationship between education and the progress of Aborigines as a socially respected and economically viable cultural group, research interests and Government policies increasingly focus on pre-school education as an avenue of constructive effort. This trend is world-wide. The theoretical recognition previously given to pre-school experience as a significant factor in physical and mental health is now extended to education. Adequate pre-school education now tends to be viewed as a solution to many of the learning problems experienced by school children from minority groups in socially disadvantaged circumstances.

The preventive flavour of such a position has a strongly appealing note, and the growing interest is welcomed by a professionally isolated and economically struggling field of work; but many questions remain about the nature of the contribution which can be expected from pre-school education, relative to education at older age levels and to environmental variables beyond those within the control of planned education programs.

Since learning is cumulative in nature, however, and since there is some evidence that early environments can seriously affect intellectual progress, educational experience in pre-school years remains a significant area for study and for practical effort.

2.1 Existing programs

Various pre-school programs involving Aboriginal children are being funded in Australia at present. Each has supporters and critics. The range reflects overseas trends and current controversies in the literature. Financial support from the Commonwealth Office of Aboriginal Affairs (Dexter, 1971), from State Ministries and from Education Departments in some places, extends to a number of experimental approaches. A brief descriptive review of some of the basic features of each provides a basis for discussing the position taken in this project. (Specific issues illustrated by these programs are dealt with fully in the following chapters.)

Aboriginal Family Education Centres

An approach initially developed in New Zealand play centres and Maori Family Pre-schools now forms the basis of an action research project in N.S.W. This was initiated in 1969 under a grant from the Bernard van Leer Foundation (Grey 1972, Lester, 1972). A similar approach to work with Aboriginal families is taken in another van Leer project in South Australia, where experimental programs are being developed at Marree and Ernabella (Teasdale, 1972).

Some basic features :

1) centres are developed and operated by Aborigines in communities where Aboriginal families themselves decide to establish these; they are primarily for Aboriginal families.

2) project staff confine their role to one of advising on request.

3) the pre-school program (for children up to 6 years) takes the form of a family group, with parents, grandparents and young children attending together.

4) development of positive self-concepts as Aborigines is a primary educational objective, for both adults and children.

5) self-initiated informal play is characteristic of children's activities. (There are variations in the South Australian project where Sesame Street programs and a thematic approach to curriculum planning are included in an effort to stimulate cognitive and linguistic development.)

6) Aboriginal adults act as teachers.

7) parents observe and discuss children's activities, and their own role in helping children learn, with the help of prepared booklets and tapes.

Some current reactions :

1) the involvement of parents in developing their own centres, and the freedom and encouragement these give to Aborigines to develop a distinctive way of life, are widely accepted as positive features.

2) questions have been raised about the extent to which the overall program meets the educational needs of children as well as the cultural needs of adults, and whether the purpose of increased autonomy and self-respect as Aborigines is best served by a program which restricts interaction with the general community.

Compensatory structured language program

Experimental work (Moffitt et al, 1971) at Bourke, N.S.W., stems from an interest in replicating in Australia the action research program developed in U.S.A. by Bereiter and Engelmann (1966). The results of using their language teaching techniques with part-Aboriginal children are compared with those from a program described as closely resembling that of established suburban pre-schools. Three and four-year-old children are the subjects of the experiment.

Some basic features :

1) the general approach to learning problems is one of educational intervention.

2) teaching efforts are concentrated on specific areas of language "deficit" for which some minimal goals are defined.

3) the project is based on an experimental research design, with pre- and post-testing of groups receiving contrasting educational "treatment."

4) standardized psychological tests are used as measures of educational progress.

5) there is an effort to document elements of the alternative learning environments created within the program.

Some current reactions :

1) recognition of the additional evidence that structured language programs can decrease certain differences in the language development of children from socially "privileged" and "deprived" cultural backgrounds.

2) questions about the theoretical approach to language development adopted; about the educational relevance of the measures of progress

used; and about the adequacy of an "educational intervention" framework for pre-school education.

Regular pre-school centres

Pre-school programs in Government-subsidized pre-school centres supervised by established organizations have been assumed to have sufficiently common features to represent a third approach, described in the literature as "traditional." With increasing efforts to contact Aboriginal families, the number of Aboriginal children attending such centres is gradually increasing. Centres of this type (with some program modifications) have been, in fact, engaged in work with Aboriginal children in the Northern Territory prior to recently increased concern with education for Aborigines in all States (Swift, 1968).

The main basis for the common label "traditional" would seem exclusion from the categories just described, rather than similarity in the actual programs of a relatively large group of kindergartens. In contrast to other approaches, however, some similar emphases exist, at least in principle.

Some basic features : (see Chapter 6 for further discussion)

1) programs are more heavily influenced by teachers' observations of individual children's general progress, and their current interests, than by some common, sequenced curriculum for all children.

2) there is concern with all main areas of development, rather than concentration on a narrower range of skills more directly related to academic progress. A high value is placed on activities which allow for creative effort and for the sharing of ideas.

3) self-initiated play is considered an important source of learning.

4) qualified teachers are employed.

5) parents are in active communication with teachers, but not usually responsible for taking a teaching role in the program.

Some current reactions :

1) programs in regular pre-school centres lack the ingredients needed to compensate for underprivileged environments, particularly those affecting language and cognitive development.

2) standards set for staffing, buildings and equipment are not valid or necessary for the education of Aborigines.

3) the individual orientation of program planning is closer to equality of opportunity in education than programs based on blanket assumptions about disadvantaged groups.

New variations in the approach of established pre-school organizations to planning programs with Aborigines are evident. It is too early yet to describe the outcome.

Notes : other work with Aboriginal children

Save the Children Fund Centres have also developed contacts with Aboriginal families with young children. Their contribution is one which, at a general level, offers help in bridging the social distance between Aboriginal and white communities. Although some centres now employ qualified teachers, S.C.F. Centres as a group do not represent a distinctive educational approach which adds to those already listed.

Two of the four Australian programs of work with Aborigines, funded by the van Leer Foundation, have already been noted (N.S.W. and S.A.). A third is the subject of this report (Vic.). The fourth program is a language development program in Queensland. This is concerned with designing compensatory language programs for use with children aged from 5-7 years (Alford, 1972, and Department of Education, Qld., 1971). Work with pre-school children in this project has been geared mainly to descriptive analyses of most commonly used language forms on which to build teaching materials. It does not represent another basic approach to teaching Aboriginal children under school age.

2.2 Purpose of brief review

This brief statement of some recognized features of alternative approaches to early education does not do justice to any one. It merely serves to direct attention to the problem faced at the outset of this project, and facing teachers and Governments as the field of pre-school education meets new responsibilities. On what grounds does one select from these alternatives? Obviously, all have positive features. Should we proceed to experiment with differing programs in Australia and, if so, on what bases might they be evaluated? To what extent are there basic conflicts between approaches? Is there little involved educationally or culturally, in the choice, so that personal preferences are acceptable or diversity *per se* of value?

2.3 Initial conception of Monash University pre-school project

In exploratory discussion with Aboriginal families and the van Leer Foundation work in this project was conceived, initially, as developing along the lines of the New Zealand pattern of Family Education Centres. This approach expressed the basic respect for Aboriginal cultures which was of concern to all involved; it was also known to be acceptable to those Aborigines with whom the idea had been discussed.

Staff eventually appointed to develop field work, however, considered that many other issues needed to be made much more explicit before it was decided to support the establishment of one particular form of organized activity. In the absence of information about the preference of particular part-Aboriginal parents for involvement in group activities predominantly Aboriginal, or about the progress of their children with different aspects of learning, it was important not to pre-determine even the general organization of a pre-school program. In addition, the relationship between cultural and educational values and their behavioural counterparts appeared to need examination.

2.4 Re-formulating the framework for decisions on field work

A forced choice between particular types of programs, which overlapped in some respects, seemed to us unnecessary. This "packaged deal" approach to decision-making in education is somewhat artificial since many important ingredients of each approach (both positive and negative in respect to certain issues) are not even listed on the labels. The emphasis on differences, on "new" solutions, appears to be a product of the world-wide need to appeal to sources of funding, or the need to appeal to the consumer.

Progress, obviously, will be affected by both available finance and what is wanted by a particular population. But if financial and social problems determine the content and methods of pre-school programs, then the outcome of these programs may not be of educational value at all.

In order to sort out and avoid multiplying the many confusions in current discussions of the relative value of different types of programs, it is necessary to stop comparing them in activity-oriented terms. The cultural and educational issues buried in differing approaches need to be identified and examined. Abstracting these allows comparisons to be made on the same issues across different programs : taking educational objectives, for example, at present what children are being helped to learn is specified carefully in one approach and hardly at all in others. This means that arguments about their relative effectiveness are quite pointless, since their purposes may differ in the first place. As long as these purposes remain unidentified, relative progress cannot be assessed and arguments for that program are dependent on its social or political appeal, or purely on matters of expediency.

Further, it is widely accepted in principle that the direct transfer to new situations of activities successful for particular individuals in one country, one locality, or one pre-school centre, is inappropriate. It ignores differences in attitudes, interests and abilities (learned or otherwise) as well as local needs and practical problems. This is no more helpful to progress than valuing diversity for its own sake. Using a medical parallel, one would be arguing that people should be treated with a particular drug because we are now aware of new diseases to which they could have been exposed; we have neither diagnosed their presence nor studied the incidence of infection where conditions might lead one to suspect an outbreak. Or, those for diversity per se would be taking a position equivalent to "all drugs are useful," regardless of some definition of health!

Interestingly, progress with educational problems seems to be a matter of whether we use, and value the use of, certain products of education itself. We can either maintain a trial and error approach in which we organize the concrete world in different ways and observe the outcome of varying activities (attending a regular pre-school centre, a Headstart program, a structured language program, a Family Education Centre, or watching Sesame Street); or we can explore relationships at an abstract level - formulate questions clearly; classify perceptions of people and events according to criteria relevant to learning; think out relationships between purposes and methods on reasonably logical grounds, holding multiple dimensions of a problem in mind; apply stored information about causal relationships while retaining the utmost flexibility to create new ways of doing this in different sets of circumstances; keep the resulting activities open to evaluation and revision in the light of new knowledge and experience; and take responsibility for validating our statements, when it comes to professional communication. (It is not suggested that we do not discuss education at a conceptual level, but rather that we may have a proliferation of non-functional concepts and theories which serve purposes of general description and comparison rather than of decision-making.) If a trial and error approach does have value (and can be justified on ethical grounds), it is still dependent on defining the purpose of the experiment. What is the hoped-for outcome, in both cultural and educational terms?

Apparently, the educational "problem" has not yet been formulated at the pre-school level either.

2.5 Monash University Van Leer Pre-school Project: summary of approach in relation to other Australian programs

This project does not add another visibly different "type" of pre-school program to those already described, and set out to study or demonstrate its value. Instead, it holds that the form and organisation of activities is important only as these represent decisions concerning the psychological and socio-cultural dimensions known to be important in all education programs.

In order to examine these, it is necessary to move from discussing activities to a conceptual framework in which some basic teaching responsibilities can be identified.

The meaning of this general approach will, it is hoped, be illustrated in the rest of this report. The next sections set out the issues for thought and report the point reached in thinking as we began field work. The description of field work following then indicates how decisions on these issues were translated into action in two different situations; how the activities by which this was done were influenced by each setting; and at what points such differences were immaterial or represented significant problems to be solved.

Swan Hill program
Courtesy: Ministry of Aboriginal Affairs

SECTION II: BASES FOR ACTION

Issues in the education of Aboriginal (and other) children and initial position taken

Introduction

Urgent pressures for action, originating in both human and political concerns, conflict strongly in projects such as this with the need to clarify the issues involved. But there are no short-cuts through the conceptual confusion resulting from rather hurried responding to such pressures. Some compromise is obviously needed. Accordingly, it was decided that:

1) before proceeding with field work in this project, sufficient thought must be given to a set of basic issues to establish some guidelines for action based on available information. These would provide a consistent frame of reference for decision-making on practical matters. The initial position taken should be open to question as work progressed.

2) field work should retain sufficient flexibility to allow major practical revisions as work proceeded.

3) in reporting field work, responsibility must at least be taken for defining the operational meaning of concepts such as pre-school education within the context of this project, and for identifying the major points at which action of necessity precedes knowledge and preparation of the necessary tools for evaluation.

4) work being undertaken under another grant, towards developing a conceptual framework for describing pre-school programs and establishing criteria for their evaluation, would be used, tentatively, to help with this project.

This section of the project report sets out the major issues on which it was necessary to formulate an initial position, and to relate it to that taken by others.

Chapter 3 THE PURPOSE OF EXPERIMENTAL PRE-SCHOOL PROJECTS: TEACHING, RESEARCH, OR BOTH?

Immediately discussion of action begins, there are hidden assumptions of purpose. The ambiguous findings from action research illustrate the need to establish some consistent frame of reference for decision-making, in advance of any field work. In this project, too, early planning discussions made it evident that those involved perceived project responsibilities in varying ways which would lead to quite opposite action at points. It was necessary to arrive at some common point of departure.

The basic conflict of purpose was between teaching and research. Could these proceed concurrently? To what extent did they overlap? Most importantly, who was to benefit from the project?

It was easy to reach agreement about primary purposes. The major benefit of the project was intended to be for Aboriginal families, in the form of educational support - first to those participating in this project and later, hopefully, to others in new areas, as experimental work offered guidelines and experience for developing pre-school education services. This, in fact, was the purpose for which funds were granted.

It was much less easy to accept the implications of this decision for the University, and the practical repercussions. Usually, it is assumed that the involvement of a University in field work operations carries a research responsibility. Particularly in the pre-school field, where Australian Universities are not involved directly in practical administration or teacher training, this appeared a reasonable position for the University to take, in accepting funds. Further thought, however, led one to qualify this expectation to a considerable degree, depending of course on some definition of research. Apparently, to date, the political "cut" to Universities from involvement in action research projects in pre-school education (in terms of the public image Universities present, the funds they draw,and their involvement in current research trends) has clouded awareness of a conflict of professional interests, sufficiently serious to cast doubt on the value of some current activities. The major conflict does not arise when research is geared to descriptive questions. Even here, however, there are difficult choices.

3.1 Teaching and descriptive research

In this project, for instance, research interests suggested some value in trying to document levels of learning in part-Aboriginal children and a picture of adult-child interaction across a group, before any introduced education program influenced these.

Any chance to help with the education of children was, however, completely dependent on establishing a situation of trust, and positive communication with parents. First impressions could make a difference to whether the chance to develop such communication even existed, in a group which has learned over time to mistrust the motives of the white population; a group, too, tired of being the object of observation, question and discussion, which serves the immediate purposes of others and offers, as far as Aborigines can see, little help with their own problems. In such a situation, each non-Aboriginal adult must establish personal credentials, and no compromises are possible. Either one's immediate behaviour clearly expresses respect for and concern with Aborigines, in ways they understand and find acceptable, or one's motives are suspect and contact is avoided.

The introduction of observers with notebooks, engaged in activity which could not be openly explained if parent-child interactions were to remain spontaneous, was not only unlikely to create feelings of trust, but a practical impossibility. (There was no existing group in which such observations could be made in the areas selected for work; being invited into homes was a privilege not extended to unknown non-Aborigines and any suspicion of being under observation at home was known to create high anxiety and hostility. Early contacts with children indicated that communication and control could not be established sufficiently in a test situation to obtain valid data; trying to force this would be a very poor start for teaching purposes and, by artificially depressing initial test scores, would inflate any "cognitive" changes measured from this baseline.) In this case, the decision in favour of a first step towards educational goals of benefit to those families immediately involved was almost a forced choice. We decided to content ourselves with informal observation and delayed initial psychological tests, in order to create an educational opportunity.

Had such a position not been so necessary, however, careful documentation of child-rearing behaviours, under conditions allowing reliability checks and information gained from using standardized tests, would have been as valid (and possibly even more meaningful) for teaching as for research. For education, such information provides measures of what has already been learned, and information on how factors thought to influence learning, are operating in particular families. For research, it might allow comparative and correlational studies which give rise to hypotheses, highly relevant to educational pursuits, which might be subjected to experimental test.

The first of these is one aspect of evaluating work with any particular group. It raises no conflicts since the purpose is to help with future planning of immediate objectives for that same group. Responsibility for such measurement of progress is accepted without question for this project, with the proviso discussed later in the report in relation to evaluation.

3.2 Teaching and experimental research

Evaluation such as this, however, needs to be differentiated from activity leading to the second purpose, which generates information relevant to new situations, so meeting one criterion for research. If it is intended to advocate the general value of a certain approach to teaching, then meeting the scientific safeguards which allow such interpretations creates conflicts with some basic features of adequate teaching behaviour - particularly that based in research findings on individual differences.

The summary following shows the points at which conflicts tend to arise.

STUDYING QUESTIONS OF CAUSE AND EFFECT IS CONSIDERED TO REQUIRE:	EFFECTIVE TEACHING IS CONSIDERED TO REQUIRE (amongst other things):
For decisions on what should be taught	
1) Decisions prior to sampling	Decisions following contact with the particular children to be taught
2) Relevance of objectives to: hypotheses derived from theory and available knowledge from their empirical testing. (i.e., what can be done) the researcher's professional background and interests what researchers have previously learned current research by others	Relevance to: what is considered of educational value (i.e., what should be done) the cultural background and experience of those learning the cumulative outcome of what each child has previously learned what the environment elsewhere (e.g. at home) provides for his development
3) Concentration on a few variables selected for study	Responsibility extending to concern with all major aspects of development, even though planned teaching effort temporarily focuses on certain priorities. (It may not do so in ways which have adverse effects on other aspects of learning - also known to be important)
4) Maintenance of initial objectives throughout project	Adjustment of emphasis in teaching objectives according to individual progress across interacting areas of learning Responsiveness to parental concerns and immediate problems with children in deciding teaching priorities
For decisions on method	
5) Decision in advance on what aspects of environment will be manipulated (for observation of effects)	Decision on aspects of environment to be modified after comparing theoretical relationships, relevant to goals, with parallel factors in a particular child's environment
6) Standardized methods of introducing modifications to environment across all cases (in terms of both form and amount)	Flexible treatment across individuals in relation to varying objectives, anticipated individual perceptions of guidance, interests, physical and emotional states at the time, progress in related aspects of development, factors operating outside the program (e.g. at home) (cont.)

7) Detailed concentration on a few specific elements of environment	General awareness of a wide range of conditions affecting immediate experience
8) Limiting of child-initiated learning activity in order to control variables which may confound results	Support for a significant degree of child-initiated learning efforts within a prepared setting
9) Freedom from commitment to specific outcomes (affecting objectivity)	Responsibility for facilitating specified outcomes

NOTE: There is no basic conflict between the two frames of reference in whether teacher-input or materials used can have some sequential structure.

It is recognized that a number of these points need to be amplified, since they represent major questions in research and teaching fields on which there may not be general agreement. The summary presented may suffice, however, to communicate the general problem.

3.3 Hidden conflicts in action research

Concern with these hidden (and at points inevitable) conflicts in action research stems from awareness that activities given this label, and usually expensive in time, effort and finance, have not in the past served their intended purpose for pre-school education. This appears to be true whether one asks if action research has yielded reasonably unambiguous research findings or has resulted in lasting educational gains in the children participating.

Some investigators have heeded warnings (Swift, 1964) about the need to specify (if not document) particular elements of learning environments in psychologically relevant terms, and to measure particular effects on children thought to be related. This removed the earlier problem of trying to assess some overall effect of attending a pre-school centre. But these attempts to strengthen the research components of action research have had some adverse effects on teaching. Leaving aside problems surrounding selection of teaching objectives, action research with children from cultural minorities has drawn attention to those conditions for learning imposed by the nature of what is to be taught, at the expense of recognizing those imposed by the nature of those learning and by individual differences. In teaching there is a need to retain concern with both these sets of research findings. In experimental research, it may be necessary and legitimate for limited periods to ignore the second set, except for controlling a few general variables. It is not considered legitimate, however, to equate this activity with an adequate pre-school program, particularly when, for this purpose, the selection of objectives may itself be open to serious question.

Examining a report on their program by Bereiter and Engelmann(1968), helps to identify sources of confusion arising from recent action research with pre-school children.

1) The purpose of work is stated clearly: "..... to see how much the children could learn in the areas of language, arithmetic, and reading through straight-forward teaching of carefully presented content." (Bereiter & Engelmann, 1968, p.17). This is a research question. It asks, "What can be done, under certain conditions?" The teaching question, "What should be done and what conditions are needed for that?" is not the focus of study. Findings from this experimental work can, therefore, help with decisions on teaching objectives in other programs, in the sense of awareness of possibilities. They do not in themselves, however, answer problems of selection between various possibilities.

In terms of the purpose of teaching, then, decisions in Bereiter's experimental project are being made in a research-oriented framework. The object is to acquire some information relevant to the field of education.

2) Given this orientation, what questions about methods of teaching will the project also answer? As a research design, there is no plan for studying alternative approaches. The information resulting from work again will show how a certain combination of teaching techniques can influence some aspects of learning, the selection of both being justified from a research viewpoint. (This is not to say that such aspects of learning or teaching methods are not of educational value, but merely that Bereiter and Engelmann do not deal with the teaching issues at stake).

Interpretations which assume that the teaching methods employed in this program are necessary or optimal for children lacking in early progress ignore the fact that both goals and methods differ in other programs with which comparisons are made. The same amount of concentrated effort on identical goals, using different teaching practices would need to be made, and side effects also considered, before any advantages could be claimed for an instructional, drill-based approach to teaching. Further, the effects of this manner of interacting with children in a teaching setting are not separated in the Bereiter and Engelmann study from the effects of careful definition of the content of what is to be learned, and from the effects of the sequential structuring of the cognitive tasks and information presented. These elements are not necessarily interdependent. The established pre-school field may overlook the important emphasis on defining what is to be learned and presenting information in some logical sequence because these are associated with other teaching techniques for which no convincing argument has been advanced.

This situation illustrates the dangers of hidden frames of reference for decision-making on action. The investigators have taken the responsibility of stating their research purposes and reporting accurately on their results. But the program is labelled a program of pre-school education and seen as an alternative to other 'types' of programs, as though it were designed with careful attention to educational issues. This is not the case. For example, it was assumed that the learning difficulties of the "disadvantaged" children to be enrolled would stem from a less advanced level of knowledge, but there is no information to this effect on the children actually enrolled. (See point 1 of summary of conflicts.) In fact, even within the area of intellectual development, findings on these children indicate a basic lack in other aspects of intellectual functioning which limit the usefulness of the knowledge acquired as a result of special training (Bereiter & Engelmann, p.34).

The pre-school program for Aboriginal children at Bourke, N.S.W. (Moffitt, Nurcombe et al, 1971) has a research interest in replicating the Bereiter & Engelmann study. In this case, however, the design included a control group, with the purpose of comparing the relative effectiveness of "structured" and "traditional" teaching methods. But again, it is necessary to sort out the responsibilities which the design of the study indicates have been undertaken. A research-oriented program designed to answer a very specific question (how much certain teaching techniques can accelerate very slow progress with some arbitrarily-selected goals) is now compared with a program of activities for which the educational goals and teaching techniques remain unidentified. For example, in the "structured" program designed for the experimental group, some minimal goals in very specific aspects of learning, and some logically related teaching procedures are described. The "traditional" program for the control group, however, is described as a sequence of activities, not necessarily representative of regular pre-school centres, but more critically, not descriptive of any educational objectives or teaching practices.

Further, the main difference between the "traditional" and "structured" programs is reported as that of the teacher-child ratio, in favour of the structured program. It is assumed, however, that the superior performance of the experimental group is due to the "task-oriented" approach taken. To quote: "The immediate gains yielded by the programme suggest that a task-oriented approach is likely to be the method of choice in pre-school education of culturally deprived children." (p.59). Whether or not the documentation of "structured" and "traditional" learning environments had been more equivalent, information from a study asking a limited set of research questions needs to be used in relation to many other existing research findings, and consideration of many other aspects of learning, before such an educational recommendation should be made. (Issues related to selection of goals are not relevant to the argument here and will be dealt with later in the report.)

These examples are included as an illustration of the inconsistent frame of reference underlying action research, and the importance of some evaluation of its contributions to both research and teaching activities. The general label of "pre-school program" attached to action research with children leaves its purposes, and therefore its contributions, far from explicit. It tends to escape evaluation on either research or teaching grounds. Recognition that both these professional activities carry their own responsibilities and standards might allow the problem of conflicting frames of reference to be solved by encouraging better communication between the fields of psychology and education. At present, resources are used to fund action research projects by educators which are naive in terms of the research criteria necessary for obtaining facts; and to fund action research projects designed by psychologists which bring methodological sophistication to bear on questions which may not be basic to educational concerns. Perhaps it is time to differentiate various types of field work. This would avoid the tendency for some contributions from experimental programs to be rejected because other aspects of these programs are so unacceptable.

3.4 Reporting activities and results

Depending on the acceptance of research or teaching responsibilities, there are conflicting expectations for reporting the results of a study. In the field of research, one is expected to justify expenditure of funds by making results generally available. If, however, one accepts educational responsibilities, it is necessary to ask how this affects the work to be done.

An example of the unspoken frame of reference which operates here occurred recently. The results of a study of the school achievement of Aboriginal children, in comparison to that of others, showed significantly lower levels of progress for the Aboriginal group. Since a research organization is expected to communicate the results of its activities, a report to the public seems appropriate. If, however, one is taking responsibility for trying to reduce the educational problem, the inclusion in a television broadcast of findings which added very strongly to the existing negative stereotype which the community holds for Aborigines is a source of frustration and concern.

Publicity, then, for a research institution or for those responsible for a project may be helpful in obtaining recognition and further funds. It may, however, have exceedingly negative outcomes for those for whose benefit such funds are solicited. This situation requires a choice of priorities, and co-operation between those with an overall common goal.

3.5 Position taken for this project

With awareness of the limitations of attempting research and teaching concurrently, a consistent frame of reference was sought for this project. Priority was given to teaching purposes, and evaluation undertaken in educational terms.

Some contributions to research could still be made, but these would depend on what data could be obtained without jeopardising teaching requirements. An experimental design was precluded by the frame of reference chosen.

The privacy of families participating in the program would be respected, as in any pre-school centre, and any information acquired in the project should be used in ways which had positive results for Aborigines themselves. Rather than adding to research findings, the main purpose of the project would be to use what was already known to help with teaching tasks, and to use information and experience from the project to clarify educational issues.

Chapter 4 CULTURAL ISSUES IN EDUCATIONAL PROJECTS

Given an orientation to educational purposes, in what cultural perspective might a project such as this have some contribution? There are cultural questions to be considered both in ways of working with families and in the content of what is taught to children and methods of teaching used. The more basic question, however, is whether non-Aborigines have any legitimate role to play in the education of Aboriginal children?

4.1 Communication problems

Efforts to deal thoughtfully with cultural questions in education precipitate strong feelings of frustration and concern about existing communication problems. Obviously, the question of who should be teaching Aboriginal children is largely dependent on what is to be learned. When the meaning of "education" varies widely within our own community, and the lines between the concepts of "education" and "socialization" are blurred, carrying the questions into a cross-cultural dimension compounds the thinking problem and multiplies, alarmingly, the chances of misunderstanding between people.

The impact of this situation was experienced in several conferences attended in the early stages of this project. Aboriginal delegates, University students, representatives from the general field of education, from pre-school education, from psychology, lacked any common interpretation of the word "education." This problem remained unidentified; consequently, discussion of action without group agreement on what such action was intended to achieve created an artificial sense of friction; and, in order to be accepted, recommendations had to be so general that there was freedom in their ambiguity for quite different interpretations, and they seemed to offer little concrete help. Some effort to deal with these communication problems appears to be urgent if one cares about the social outcome, immediate or long range. Recommendations for action in education should, it seems, be stated in the context of : 1) the hoped-for outcomes for those learning; 2) the professional and practical reasons why action recommended is seen to facilitate these goals; and 3) the bases on which such goals are thought to be justified.

Many opportunities for verbal communication occur under such pressure of time that there is little chance of sorting out apparent confusions. A written report creates an opportunity to try to unravel some of the arguments on cross-cultural issues in the education of Aborigines. It is likely, however, that the current situation, rather than reflecting communication problems alone, results from the absence of some mutually acceptable sense of direction in Aboriginal/white relationships, and some undone work in defining the nature of education. It is these which warrant primary concern.

Areas for thought

Some of the major controversies about cultural concerns in the early education of Aboriginal children might be grouped as follows:

1) conflicting interpretations of observed differences between

Aboriginal and other Australian children on standardized tests of intelligence

2) the question of whether Aboriginal children should be taught primarily by Aboriginal adults

3) issues of parent involvement in education

4) the implications of special provision for the education of Aborigines and the matter of "equal rights"

The most important of these questions is, of course, whether or not there is any legitimate role for non-Aborigines in the education of Aboriginal children. In order to deal with the real issues here, it is helpful first to establish a position on the general importance or cultural relativity of some of the differences in learning between Aboriginal and other Australian children which have been documented in research reports (Bruce et al, 1971, de Lacey, 1970). Such differences have been the origin of major compensatory education programs elsewhere; now the influence of these programs is being felt in Australia. What is the cultural significance of such differences for educational planning?

4.2 Cultural difference or deficit?

If the present discrepancies between Aboriginal and other children on intelligence test performance and in school achievement were to be reduced significantly, would this represent some significant change which had positive repercussions for Aborigines, beyond the school setting?

An automatic "Yes" in response to this question has not been acceptable in this project. For one thing, relationships between the concepts involved - intelligence, education, and the socialization process of any one culture are quite unclear at any operational level. For another, the validity of existing standardized tests as measures of "intelligence", either across cultures or within one, is open to serious question.

Although this project is directly concerned with the educational situation of part-Aborigines, the contrasts which emerge from more extreme cross-cultural studies provide a way of gaining perspective on our own intellectual biases, and therefore on the meaning of these for either traditional Aboriginal or part-Aboriginal populations.

The cultural dependency of intelligence tests

Recent re-structuring of the concepts of intelligence underlying psychological tests constitutes one of the most significant contributions to tackling questions raised by observed differences in ethnic and sub-cultural cognitive development. Ferguson, in a seminal paper in the early 1950's, presented a hypothetical construct of abilities as "over-learned acquisitions" with the limits to such learning being set both by biological tendencies and by cultural factors which proscribe what should be learned, and at what age. This provided a theoretical framework, at least, for scientific study of differences, demanding that they be detailed in objective terms rather than left as global, ethnocentric judgments of deviation in a negative direction from the norms of western technological societies. Vernon more recently (1965) has characterized the concept of intelligence itself as "culturally parochial" : "the group of skills which we refer to as intelligence is a European and American middle-class invention."

Others have entertained the possibility that different cultures might well focus, to their advantage, on different skills such as those that go to make up "creativity." The basic contradiction implicit in the notion of "culture fair or free" tests is given explicit recognition in the recently published Handbook No. 10 of the International Biological Programme (Biesheuvel, 1969). "In the measurement of higher mental processes it is more than ever essential to recognize that there are no tests which measure basic intellectual functions independently of the cultural context within which these functions develop." Such strictures also apply to sub-cultural groups studied. This is emphasized by Baratz (1970) in an article discussing the implications of a recent evaluation of Head Start programs : the initial test scores of young Negro children provide evidence "not of educability, but of the degree to which the child is familiar with the (cultural) mainstream upon which the tests are based both in content and presentation".

This contemporary recognition of the cultural dependency of psychometric models of intelligence has found echoes in exponents of an ontogenetic development model such as Piaget's. Thus recent Piagetian research has evidenced a growing interest and concern with the differential impacts of cultural "milieu" on the earliest stages of development. This contrasts with an earlier "Piagetian" position which seemed to regard children under wide ranges of cultural and socio-economic conditions as attaining concrete operations at 6 - 7 years - only the use of formal operations in adolescence appearing much subject to socio-culturally determined factors. J. Goodnow (1969) would seem to give expression to this changing orientation in Piagetian research when she outlines the new research vistas which can open once it is possible to shift from a concept of overall lags in development to a concept of differential vulnerability among tasks (Piaget's Tasks at the level of concrete operations). As she sees it, the least vulnerable of these are probably not the easiest, but those where a wide range of milieus provide experiences with appropriate "action models" for the tasks. Recent preliminary research findings (E.R.I.C. 1970) suggest that a more objective, detailed study of an ostensibly "disadvantaging" milieu (that of unschooled, junk-boat dwelling, Hong Kong children) may reveal some unexpected "accelerating" effects on the acquisition of certain intellectual structures (concrete operations in projective space (Piaget, 1953)), when these are investigated by an appropriate translation of tasks. In this emerging climate of reduced ethnocentrism it has become no longer tenable to conceptualize cross-cultural, ethnic and sub-cultural differences in intelligence in terms of inferior scores on unitary or multiple factors, or as developmental lags in the emergence of intellectual structures. They would seem to be more appropriately conceptualized as differences in cognitive patterning and of cognitive style, of preferences in information-processing and so on, that reflect, essentially, the demands of different cultures - equally intelligent in terms of their own milieu but with limitations, not unnaturally, in others.

Man, as the sociologist Wright Mills phrased it, lives in a second-hand world, in a reality that is a human, social construction, and one that varies across societies. Naturalistic knowledge of the world is developed by all members of the human species - it is a necessary biolgical adaptation. Scientific knowledge has depended on the technological developments of societies, and it has come to replace the supernaturalistic knowledge of non-technological societies. While scientific concepts are epistemologically more valid, supernaturalistic ones are no less conceptual. Both are as valid in the societies in which they develop and equally reflect the ideologies of those societies.

However, supernaturalistic concepts represented much the more common knowledge shared by all members of primitive societies and were an important cohesive force within the society. In our own society, scientific concepts constitute a much more specialized body of knowledge that is not accessible to all groups (Berger and Luckman, 1966). On *societal* grounds, ours is the poorer in its lack of such a source of cohesive strength.

At the same time, primitive societies, certainly closer to what Bowlby (1969) terms our "environment of evolutionary adaptedness" may well have provided a superior environment for the acquisition of naturalistic knowledge - for the concrete operations of Piaget's theory of intelligence. Furth (1969) sees the highly industrialized and technological world into which children are born today, as "far from an ideal environment for the growing intelligence". In primitive societies this took place "largely by imitation and ordinarily in the context in which knowledge is used"(Service, 1966, p.66). Consequently, as this author points out, it was not necessary to give abstract expression to it. This difference in the nature, rather than in the level, of abstraction appears to be relevant to traditional Aboriginal cultures. Their richness of abstract meanings refutes any idea that, in comparison with non-Aborigines, there is a lack of conceptualization. It is likely to be variations in values rather than in ability to abstract which are reflected in the focus of concepts.

Differences between concrete and abstract levels of thinking have, however, emerged consistently from studies which contrast cognitive development in technological societies in which a market economy is dominant (Bruner, 1966) with those of subsistence cultures. Differences of this nature appear more relevant to the existing educational problems of Aborigines, many of whom have lacked full participation in the environment responsible for stimulating conceptual development in *either* Aboriginal or white Australian children. In this case the crucial factors appear to be socio-economic and psychological; while occurring with greater frequency in certain cultures, they are not unique to any one. Political situations may temporarily highlight the fact that a majority of Aboriginal children function in a more concrete, perceptual mode of thought than does the Australian population in general. But given similar social and economic conditions, non-Aboriginal children can also show similar cognitive characteristics. Research has shown these to be associated with the absence of certain environmental demands which may occur at a very general level in one culture, or only in sub-cultural minority groups in another.

For example, Beaglehole (1957) in one of the few anthropological studies of cognition, comments in reference to the test performance of the Aituki children (on a typical "culture-free" battery of Kohs, Raven Matrices and "Draw-a-Man.") that Aituki thinking functions chiefly at a perceptual, rarely at an abstract level. A similar theme might be said to permeate the *Studies in cognitive growth* (Bruner et al, 1966), where the authors contrast these modes of thinking in the urban school child and the village "unschooled" on a range of tasks in several different countries. The latter, while showing increased informational efficiency in their perceptual development, fail to develop the abstractions - "the super ordinate and hierarchical structures" from this perceptual data - that characterize the performance of the urban school child. Bruner (1966) hypothesizes that there may be a greater push toward hierarchical connections in technical cultures than in those less technical, and fewer compelling reasons in a less technical society for connecting events to anything beyond their immediate contextual setting.

In this same text, Maccoby and Modiano (1966) comment that the modern industrialized world demands abstractions by its very arrangements, its stimuli, its contrasts, its laws of justice and exchange. What is demanded of the peasant, on the other hand, is that he pays attention to his crops, the weather and the particular people around him.

Perceptual v. conceptual thinking: difference or deficit?

This question holds a different meaning at the general level of comparison between cultures than it does when applied to sub-cultural groups within technological societies.

Looking first at the more general issue: what Bruner seems at pains to establish, in contrast to other theorists working within either a "process" or a "psychometric" model of intelligence, is that this failure to develop higher level conceptual structures is not indicative, necessarily, of any lack of ability in members of a cultural group, but indicates a lack of appropriate demands within the culture itself. He also notes that, even within a culture such as our own, older children may retain a preference for the perceptual mode - remain dominated by the vividness or saliency of perceptual experience which characterized earlier levels of cognitive development, despite demands for more abstract thinking during formal schooling.

Also, as Bruner sees it, this failure to develop abstract, super ordinate and hierarchical thought structures can co-exist with a well-developed language system, despite the fact that the syntax of such languages pre-eminently exemplifies these structures. Thus, children in our own society, while still dominated by perceptual thinking, will show a fluent grasp of syntactical rules based on abstract structures; adults in less technological societies may use a language as rich and complex in structure as our own, but show failure to develop abstract concepts when presented with relevant tasks. The research work of Christina Kuhlman with American middle-class grade school children (which Bruner quotes to illustrate that his thesis has significant parallels with that of Wallach and Kogan, 1965) was also carried out in this social setting. Children who were characterized by Wallach and Kogan as exclusive users of an "associative" mode of thinking were handicapped in their performance on certain psychometric measures and also in school performance, in contrast to those who were exclusive users of a "conceptual" mode or were able to utilize either one or the other, where appropriate.

Perceptual v. conceptual thinking in ethnic and sub-cultural groups within technological societies

Recent research findings where some variety of psychometric measures have been employed suggest that the experiences of certain ethnic or sub-cultural groups in our own society may operate to produce a preference for perceptual modes, or to limit access to a more conceptual and convergent thinking mode. Such studies have been carried out both in U.S.A. and, more pertinently, in Australia. Sitkei & Meyer's (1969) study, "Comparative structure of intellect in middle - lower class four-year-olds of two ethnic groups" found both Negro and lower class white children handicapped on tests of "convergent semantic production" - more conceptual use of language - but not in "expressive language or in memory or figural activities." In these, the Negro lower-class children were markedly handicapped. Bruce (1971), in a survey of part-Aboriginal children attending elementary school in Victoria (mean age 8 years approx.), obtained data on their performance on the ITPA battery and on a selection of Piagetian tasks. The sample also included a comparative group of European children attending the same or similar schools. What characterized the group data for the Aboriginal children was their relative strength on the visual perceptual tests of the ITPA battery - on "Visual Sequencing", "Visual Recognition" and "Visual Closure" - superior to that of the European sample. (As might have been anticipated from the evidence already available, their poorest performance on the ITPA was on the tests of convergent language production - semantic and grammatical associations.) However, accompanying this more advanced perceptual mode of thinking was a much less adequate level in conceptual tasks - the typical so-called "developmental lag" in the acquisition of conservation in the Piagetian tasks selected for the survey. This result is in line with Bruner's hypothesis. Again, it seems likely that, for the group as a whole, a poorish comprehension of Standard English accompanies and contaminates their conceptual failure, but may not determine it. Bi-culturalism as well as bi-lingualism may describe at least some members of the Aboriginal sample.

In contrast, however, to the wealth of accumulated data on "culture and personality", that on "culture and cognition" is limited indeed. Also, being mostly of recent origins, it is often closely tied to the theoretical framework of the individual investigator, and as yet inadequately assimilated into the mainstream of psychological thought. A more basic problem, however, arises from the nature of some tests in current use with young children, from which statements about the cognitive development of various groups are made. This matter is taken up in a later chapter in which tests are reviewed.

Summary of position on differences in cognitive characteristics evident from performance on standardized "intelligence" tests

1) The dimensions of comparison need to be specified: two types of cognitive differences emerge from cross-cultural comparisons. One concerns the nature of what is conceptualized (i.e. supernaturalistic or scientific knowledge); the other, the level of abstraction reached in processing either.

2) Differences between cultures on both dimensions appear a matter of emphasis, rather than a clear-cut disparity.

3) Differences in the nature of concepts acquired (for example, by traditional Aborigines and non-Aborigines) appear to reflect basic emphases in cultural beliefs, values, and patterns of social organization. Differences in the level of conceptualization, however, appear to originate more in socio-economic and psychological conditions which can be identified in a variety of cultural settings, and in the social roles adopted by or allowed individuals within any one culture. In either case, if change, is expected, it is clear that it is not merely a matter of formal education.

4) The tendency to associate the absence of scientific concepts with a concrete, perceptual level of operation is inappropriate to patterns of thinking in traditional Aboriginal cultures. It may be equally inaccurate, however, to associate concern with specific values with either the nature of knowledge or level of conceptualization characteristic of particular cultures.

In the context of a psychometric approach "intelligence" is relative in value:

5) Where contrasts in either content or level of cognitive activity are apparent from performance on standardized I.Q. tests, cross-cultural comparisons in an ethnocentric framework of "deficits" are not appropriate. Since all measures of "intelligence" reflect learning mediated by a specific cultural environment, there can be no "culture-fair" intelligence tests. Recognition of cultural differences in the content of experience to be processed must be extended to differences in what type of processing a specific culture demands.

6) At the level of comparison between cultures such as those of traditional Aboriginal communities and of the majority of Australians, one may not interpret differences in test performance as "deficits", since this implies a value judgment in favour of one culture and absence of recognition of parallel positive aspects of another. Conceptual as against perceptual thinking may be described, therefore, as "harder" (since it requires additional learning), but not necessarily "better".

7) While it can be argued that perceptual thinking and supernaturalistic knowledge represent differences rather than deficits between cultures, there is little disagreement regarding the consequences of even relative failure to develop an abstract thinking mode and scientifically-based concepts within a technological society. These consequences are not limited to handicaps such as performance on psychometric tests and Piagetian tasks. Failure here limits participation in formal education, particularly at higher levels and, in the long term, actual capacity to function effectively in the complex environment of the technological society itself. Differences may, then, be viewed in terms of cultural expediency, though not of absolute value.

Re-orienting the focus of concern with "intelligence" in psychology and education :

8) The above statements relate to interpretations of the results of a psychometric approach to the study of "intelligence". The problem is one of defining "intelligence", a verbal symbol for cognitive characteristics of value. This does not mean that a psychometric approach to measuring differences in cognition is inappropriate, even if the validity of some measures in current use needs evaluation. Neither does it mean that some learned cognitive skills may not acquire - or have acquired - value in a variety of cultures.

9) The question of whether education is merely a matter of socialization in one particular culture remains to be examined. While the purpose of psychological research is that of accumulating scientific knowledge, it is generally accepted that education, as a professional field, must come to grips with value issues - including what is "intelligent" in some specified context. Once it is admitted that "intelligence" is a value-loaded concept, it is easier to clarify the relative roles of psychological research and education in reference to it. Rather than being caught in the trap of assuming that the word symbolizes some constant variable on which a value can be placed in advance, psychology might pursue the task of studying relationships between specified cognitive characteristics and the functioning of groups or individuals on dimensions of behaviour observable in various cultural forms.

4.3 The education of Aboriginal children: whose concern?

Positions taken on whether pre-school education programs for Aboriginal children should be in the hands of Aborigines usually represent several points combined: Aboriginal (parent) and white (teacher) are common underlying assumptions. At times, discussion implies the further associations of Aboriginal (parent) (informal family-type activities) and white (teacher) (regular pre-school centre). On top of this it is not usually clear whether one is discussing children's opportunities to live in an environment favourable to general development and cognitive progress, or education in the sense of planned learning situations in which intentional teaching efforts - direct or indirect - occur. A further level of confusion is added when no distinction is made between the issues and skills entailed in teaching one's own children and those inherent in teaching children from other families; or between learning in children and adults.

These multi-dimensional alternatives are then overlaid with value connotations at a very global level. One set tends to gain the support of those with sympathetic, and sometimes politically-oriented, concern for a minority group, and with anti-establishment educational values. The second combination is more likely to draw support from those who emphasize educational achievement, the contribution of trained teachers, and the opportunities for learning inherent in attending an organized education program. Even when such support is prompted by equivalent concern for increased independence for Aborigines, the practical lack of Aboriginal teachers leaves this position, understandably, open to suspicion of attempts to control and assimilate Aboriginal Australians into white ways of thinking and acting. While this situation exists, objective discussion and effective action are difficult to achieve.

Is it possible, in the current political and social climate of Aboriginal affairs, to avoid the quick intellectual closure on global alternatives for action which wrap together a number of issues, but give consideration only to one? "Cultural issues in education" can quickly become just "cultural issues"; and action on this basis may provide a very effective cover for inexplicit educational purposes. Further, a pre-school education program may become just any program of activities involving young children. The point is not that all education should proceed with self-conscious effort; it is that the usefulness of discussion depends on whether words have some common meaning in terms of real events, and that there are responsibilities attached to their use which have widespread practical repercussions.

Having rejected an ethnocentric position which would allow one to advocate, on grounds of cultural superiority, that Aboriginal children should be taught by white adults, does this mean that they should not be taught by white adults on any grounds? To take a stance of cultural inferiority - to argue that traditional Aboriginal cultures are superior to those of white Australia, or to ignore the present-day white components of part-Aboriginality - leaves Aborigines in an equally ethnocentric role. Derogation of one's own culture may relieve a social conscience, but it does not provide a positive basis for decision-making on problems to be solved. Neither is it realistic to act as though either cultural group did not have a mixture of positive and less positive features.

Is the main point in the present Australian situation that of recognizing the right to cultural difference? From this position, some have arrived at one or more of the following bases for action on education:

1) that education is inherent in socialization into the ways of a specific culture; logically, therefore, it can only be handled by members of that cultural group. Conversely, the culture of that group remains in jeopardy unless this is recognized. Minority groups are specially vulnerable.

2) that while Aborigines may value certain consequences of white education, participation in the general education system may subject them to values and behavioural requirements which are in conflict with their own. Separate facilities and programs are, therefore, justified.

3) that the motivation to learn, to develop a positive Aboriginal identity, to devise new forms of Aboriginal culture in place of those destroyed by white settlement, depends on increased self-respect in the minority group. This, in turn, depends on Aborigines having freedom to manage their own affairs, free from paternalistic influences. Self-respect is seen to be closely tied to a position of independence in relation to white society and to increasing awareness of and identification with the activities of a black community; also to removal from exposure to negative social pressures in the non-Aboriginal community, and the problems of learning in the formal education system.

In pre-school education, almost opposite positions on cultural matters can be seen. The organization of some experimental programs appears to reflect the above lines of thinking. Others, however, seem to by-pass such questions and to stress the importance of involving Aboriginal adults in schools and pre-school centres as they now exist; this is seen to help in increasing children's motivation to learn, and the identification of Aboriginal families with existing educational facilities and activities. From neither position are educational objectives made explicit. A few programs which do this are geared more directly to laying the basis for academic skills.

These positions may need re-consideration. Greater success in general in our own school system may help with ability to participate on a more equal social and economic footing in non-Aboriginal culture. This does not mean, however, that it will provide the educational experience which will help Aborigines solve the future of their own culture. The nature and origins of the educational discrepancies which are relevant to the problems which Aborigines experience, in acting with independence and confidence, would seem to need examination. A basic level of literacy and increased general knowledge may only be one part of the educational responsibility. It is hoped that field work in this project will allow further understanding of the nature of educational experience which is needed to help solve current problems. The education of white as well as Aboriginal families and communities is likely to be involved.

The frequently discussed matter of "parent involvement" in education programs cuts across two main sets of concerns. Its cultural aspects are covered to some extent in the rest of this chapter. The other area relates more directly to teaching concerns. Questions and experience in this area are familiar in regular pre-school education. Some discussion of such points arises in later notes on field work.

At the practical level, there seem to be many cultural complexities. One needs to keep some of the main issues clearly in mind. The notes which follow do not provide some conclusive point of departure for developing education programs. They are simply intended to convey something of the directions of thinking underlying exploratory teaching activities and contacts in this project.

Education, socialization, and cultural change: what inter-relationships?

The current emphases in studying relationships between education and culture tend to be uni-directional. Much is heard, for instance, about cultural effects on cognitive stimulation and language development. In any planned education program, however, one faces the reverse question. What are the effects of education on cultural behaviour and values? Here there is much less help; and "education" needs to be defined to some extent before the question is meaningful. If by "education" one merely means the system and facilities by which educational activities are organized, this is one aspect of cultural behaviour and the question of concern here has not yet been asked.

If, however, one wants to consider the influence,on cultural patterns and values,of socialization with or without awareness and the teaching of certain cognitive skills, a relatively unexplored set of questions becomes pertinent.

It is usually assumed that socialization with in-built educational ingredients creates the possibility for cultural modification, as well as for continuity. Ability to reflect on and to learn from one's experience, and from the experience of others across a range of cultural variations, would seem likely to increase the probability that some aspects of contemporary cultures might not be fully accepted. If this is true, there is little doubt that education in this sense introduces something very different into earlier forms of traditional Aboriginal life. Here, continuity in various forms was itself a basic value (e.g. Berndt, 1972).

There are, however, some major questions to be asked about the extent to which cultural behaviour is open to the influence of thought and knowledge. This in itself seems a neglected variable in both cultures and individuals. There may be more evidence that education is more responsible for the rejection of aspects of cultural activity and values than it is for their replacements. One has some doubts about the relative force of objective and creative thought, against the social and material reinforcements of social approval and practical expediency,and concensus of opinion, in deciding community affairs. The real influence of education may be indirect, through its influence on technology and the economy - with very different results for people. The possibility that education leads to questioning of the culture into which one is socialized, and not to developing positive modifications, might suggest the need to look at the balance between certain varieties of cognitive skills now emphasized in education.

Given the present situation which requires resolution of cultural directions, education in the sense of increased ability to examine and deal with one's own life situation, to control one's exposure to negative experience, and perhaps - eventually - to create new and distinctive Aboriginal cultures, could have particular significance. This outcome is likely to depend heavily, however, not only on the nature of cognitive skills that are learned, but on the degree of freedom which the economic and social environment allows for their creative use in thought and in action. It is recognized that socialization, or the ability to participate adequately in a social system,may occur with or without committment and with or without deviation (Hunt, 1972, p.3). Perhaps it is ability to participate without commitment, and the contribution of education to positive deviation, to which efforts need to be directed.

Two aspects of the present scene need consideration in this context.

1) Expectations of the extent of Aboriginal interaction with the general Australian community

It is frequently assumed in discussion that the physical proximity of white and Aboriginal populations makes it necessary for Aboriginal children to be taught the ways of the general community. This may not, however, be how Aborigines see their position and, theoretically, various degrees of interaction are possible. Hopefully, the future settlement of land rights and of other political and economic issues will allow a wide range of choice in reality. Where traditional patterns of tribal life continue, some degree of interaction with non-Aboriginal Australia is still almost inevitable and may be desirable, if mutual respect is established. There are special considerations here.

If the degree of contact preferred by full-blood Aborigines is limited to ability to communicate with, rather than participate in, the wider community's affairs, the extent to which communication is possible without a common experiential basis seems open to thought and study. Possibly there is more leeway here than previously thought.

To concentrate, however, on Aborigines who are physically assimilated into the general community, they would appear to need to be in a position to participate fully in general community affairs, to the extent they wish to do so, with confidence and success. Differences are anticipated in the degree of interaction preferred; and freedom to move in the direcion of either culture may need, particularly, to be preserved for them. There are many possible re-combinations of values and behaviours, without the artificial re-creation of an earlier tribal life. Efforts to talk with parents about their preference for themselves and their children, in regard to participation in white society, are part of field work plans for this project. To what extent this matter is one to which they have been able to give conscious thought is, however, unknown at present.

In the meantime, it is assumed that Aboriginal families, housed in urban settings, wish their children to acquire the skills and information needed to interact on an equal footing with non-Aboriginal Australians, in addition to whatever aspects of Aboriginality their parents wish to, and are able to, teach them.

Without a certain degree of informal family participation in the wider society, such learning may be difficult. Evidence on the effects of cultural milieu on language development shows, for example, the importance of Aboriginal parents' expectations for their children being consonant with the socio-cultural experience they provide. It is not just a matter of relative geographical positions; for while it is possible to make some broad generalizations about groups of Aborigines in physical isolation from the cultural mainstream of European society, this is not the case with other groups who, while in physical proximity, may be quite effectively isolated by social factors. However, the closer the residential locale of Aboriginal families to European ones, the more opportunities are created for the development of primary group relationships and the more likelihood that the families share some common cultural milieus. The sharing of a common milieu would seem an important pre-condition for the emergence of similar cognitive features. In individual terms, it constitutes a necessary if not sufficient condition.

From a comparative study of classification skills in full-blood Aboriginal children from groups living in differing degrees of geographical isolation, and those of European Australians, de Lacey reports: "The results consistently showed a relationship between the milieus and the classificatory performance of the children . . . . Among the Aboriginals, there was a consistent and strong direct relationship between classificatory performance and the degree of contact with Europeans and their technology." (de Lacey, 1970, p.300). While the index of contact used may represent geographical rather than cultural distance, the factor of opportunity still appears to be influential.

With awareness that physical proximity in itself is not enough to ensure equivalent opportunities for learning, educational planning appears to have a significant role in evening out differences in opportunities for interaction, now created by cultural and social conditions. While one can support arguments for separate education in order to maintain existing differences, it is harder to do so if what is wanted is a more even distribution of cognitive skills and information now possessed, disproportionately, by the majority culture.

2) The expected outcome of interaction: alternatives to assimilation

The educational predicament created by indeterminate cultural objectives is somewhat less, perhaps, for urban-dwelling Aborigines. This is only true to a degree, however; in order to act at all it has been necessary to think out our own position concerning future cultural relationships.

The inevitability of some interaction between Aborigines and other Australians need not imply a goal of assimilation. For this project, there is a third alternative to segregation or assimilation. By reducing economic and educational differences, prejudice and discriminatory practices, it is possible that a state of positive interaction, which recognizes both common concerns and accepted areas of difference, could be achieved.

Such a goal would not be reached quickly; time is needed by the Aboriginal population to re-establish itself as a viable cultural group, for part-Aborigines to re-think their lives - after having had the increased educational and economic assistance and official political recognition, which make this possible. Stressing the need for time for such a stage of cultural development does not mean a continuation of past inaction on the part of non-Aborigines, but active planning and communication; but also strict avoidance of pressure on Aborigines to adopt forms of social behaviour which conflict with their existing values and life styles. In the long run, equal sharing of social responsibilities and privileges is likely to require some cultural compromises. The point is, however, that any necessary compromise should not become a matter of conformity to the preferences of the majority group.

Is such a bi-cultural goal realistic? No doubt this could be questioned. But if so, it may be saying that neither group wants it enough to try to achieve it, and to give thought to the means of arrival. In this project, we hold the hope of a changing emphasis in Aboriginal/white interaction - a reduced necessity for Aboriginal participation in general community affairs purely for reasons of economic and social survival and recognition, and for increased voluntary participation because of a warmth of invitation; and because such interaction has become mutually enjoyable, helpful, and a valued opportunity for learning on both sides.

In the case of urban-dwelling Aboriginal families, it may be argued that no distinctive cultural differences are operative. In some families, this may seem the position, but if so, this is merely to recognise history rather than to present any reasons why its effects should be perpetuated; besides, first appearances can be misleading and there are thought to be more differences with cultural origins than are evident to non-Aborigines.

The main point at this stage is, in our opinion, to recognize that many part-Aborigines do perceive differences at present, and to allow for the future possibility of greater actual differences. This requires room for positive interaction without fear of pressure towards behavioural conformity - over and above that needed to preserve the equivalent freedom and rights of others. Even the need for and existence of planned education programs is a culturally-determined matter. Both the nature of learning expected and the degree of relative responsibility taken by parents and community are cultural variables, though not necessarily determined on educational grounds.

The difficulty at present is that, in order to solve some educational problems, it may be necessary to reach agreement on temporary arrangements which allow exchange of learning. Otherwise, the general community may have the continued responsibility of Aboriginal welfare, and education may not play the role it might in furthering the successful independent functioning of Aborigines.

A problem for this project is that Aborigines express very different reasons at present for concern with better education, implying very different viewpoints on future relationships with white Australians and widely differing concepts of "education". It is not at all certain whether Aborigines seek higher educational qualifications as a route to increased economic security and social acceptance by the general population, or whether they see its relevance to successful independent functioning as a community and to the situation of individuals within this. Further, official and informal communication from the majority group does not seem to express a coherent direction for effort.

Given goals of understanding communication, positive attitudes between ethnic groups, and a balance of freedom and responsibility-taking in a shared physical and social environment, what conditions are conducive to such learning or re-learning?

Education, basically, is a matter of communication made possible by personal relationships. In the case of social perceptions and attitudes, it is informal sources of learning rather than instructional efforts which may need consideration. There is sufficient evidence that racial attitudes are influenced very early in life to give careful thought to

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the cross-cultural social experience of children. The unknown tends to be a source of insecurity and allows no challenge to stereotypes. In this respect, it is just as important, however, that earlier negative experiences of adults - white or Aboriginal - are not left unmodified, since these are likely to play a significant role in influencing racial attitudes in young children (e.g. Radke et al, 1949; Yarrow et al, 1952).

If assimilation into the ways of the majority group is not the goal of interaction, then communication and learning - informal or otherwise - need to be part of a two-way process. In this project we planned to try to work towards such communication, through establishing a position of mutual respect and trust with individual families. This, in itself, was viewed as part of the educational experience needed on both sides.

Depending, then, on the expected nature of cultural relationships, there are grounds for not excluding non-Aborigines from direct educational contact with Aboriginal children and their parents. While material resources and recorded knowledge can be transferred to a parallel education system, human abilities can only be shared as human beings interact; and unless one is aware of what might be learned, it is difficult to pursue this or help others to acquire similar learning. Within an interaction situation, however, non-Aborigines bear considerable responsibilities for distinguishing educational help from behavioural expectations.

Whether or not Aborigines will want to take a parallel position to that set out in these working notes remains to be seen. This has different implications for a minority group, particularly a depressed one - and, on historical grounds, one could not expect to earn a position of trust easily. At present one can understand strong feelings against increasing interaction, so that what remains of Aboriginal cultures should be protected from further destruction, and serve as a source of motivation and unification for the Aboriginal communities which now exist. But perhaps other solutions can be found to this situation, since the social withdrawal of a minority group may create other problems for it. Such solutions rest with the education of the non-Aboriginal members of Australian society.

Cultural relationships and self-concepts

A number of factors are known to contribute to the formation of self-concepts and self esteem (e.g. Coopersmith, 1971). One main source of learning, however, is generally agreed to lie in what is communicated to a person by others. In the case of a positive ethnic identity, one may reasonably assume that this holds good between racial groups as well as between individuals.

Emphasis on the development of a positive self-image is frequently discussed as an important aspect of the education of Aborigines. In terms of intentional efforts, however, the focus might need to be reversed. To place the onus heavily on Aborigines for rectifying problems in this area seems to ignore the nature of those problems. It is recognition and equal consideration as human beings which has been denied to Aboriginal Australians collectively; their Aboriginality is the reason given, but it does not constitute the problem. This lies in white society. It is the responsibility of the majority group to create conditions for the learning of self-respect automatically. The education of the white population in respect to Aborigines is likely to exercise as potent an effect on positive change as what is done with Aborigines themselves. To them, we are the problem.

Watts (1971, p.1) draws attention to the responsibility of white Australians in providing a positive context for progress. "I would suggest that, until there are this acceptance and valuing within Australia of the Aboriginal cultures, Aboriginal children will grow up within a climate which is inimical to their optimal development."

In supporting this general position, one might give it a somewhat different basis: that, regardless of the content of Aboriginal cultures, such acceptance and valuing on purely human grounds are the inalienable rights of Aborigines, to which the contributions of their various cultures may add additional respect. It seems in line with what is known of human development to suggest that perhaps the strongest foundation for the ability and confidence to express positive forms of difference from the majority lies in a basic acceptance by others, on grounds of an underlying common humanity.

Cultural orientation in approaching families

One of the questions to be faced before contacting families was how to avoid a self-conscious approach to either educational or cultural matters which could make families feel singled out for attention for some negative reason or otherwise add to cultural discomfort. We had some feelings of concern here, in undertaking a special project.

Some concerns we dealt with by taking care not to attract undue publicity for the University's involvement in such work. It was decided also that the basis for approaching Aboriginal families should be one of general concern for the educational needs of all young children in the area, plus a statement to the effect that, in this case, we were giving priority to Aboriginal families, since they sometimes missed out on educational opportunities.

Thus the reason for interaction was applicable to all families; cultural matters were allowed to arise spontaneously and discussed informally as opportunities arose; but teachers were exceedingly careful to keep within the limits of the cultural position previously established, in the meantime.

Chapter 5 THE SIGNIFICANCE OF PLANNED PRE-SCHOOL PROGRAMS FOR LATER EDUCATIONAL PROGRESS

On what grounds can one support a focus on planned programs of pre-school education as an effective insurance against later educational problems? Is the rapidly increasing theoretical interest and practical support for early education based on empirical evidence? What specially significant role is it thought to play in the progress of children from less favourable social and economic circumstances?

The general objectives of pre-school education will be discussed elsewhere in the report. The intent here is to communicate the working position taken at the outset of this project on several theoretical questions affecting our expectations of its contribution.

There are two main sets of questions:

* What is significant about development during pre-school years which makes planned education programs vital? (There is an assumption that something crucial pertains to the factor of chronological age.)
* To what extent can planned education programs for children offset negative factors in family and community? (The issue here is the relative value of pre-school education programs against more broadly-based programs of family education and community development.

5.1 Early development and pre-school education

The following issues were considered.

Early sensory stimulation and intellectual development

In this project, we took a cautious view of the relevance of theories of early sensory stimulation and deprivation as a basis for advocating pre-school education.

1) Findings from experimental research on animals showing relationships between sensory stimulation and brain physiology and biochemistry could not be easily extrapolated to post-natal human development. The critical period for environmental stimulation to which these studies referred was a period of maximum growth rate in the physiological development of the brain of rats, during which it was particularly vulnerable to environmental effects. In humans, this would correspond to the months before birth. Given some leeway in interpretation, no period in child development after the first year of life could be described as one of maximum growth rate for the brain. Any relevance of these findings for pre-school education would be, then, to work with very young babies. Studies of the relatively advanced perceptual abilities of newborn infants do not, however, support the hypothesis of a post-natal period of vulnerability to structural changes which could have permanent effects on learning.

2) It was unlikely that sensory deprivation, to a degree comparable to the impoverished conditions created in experimental animal research, or similar to the institutional situations associated with retarded intellectual and general development, would be found in most home situations, in any cultural group.

3) The nature of any learning associated with changes found in brain formation requires attention in relation to a concept of education. Theories of intelligence raise a question rather than demonstrate a relationship between early associative learning and self-initiated thinking and adaptive behaviour.

4) In an initial review of the literature, there was no evidence of lasting intellectual gains from compensatory action research programs providing highly enriched physical environments for four and five-year-old children from backgrounds described as "disadvantaged."

5) The above statements do not imply that qualities of sensory stimulation are not important in pre-school years, but that they are unlikely to be important for the reasons claimed in recent action research. It is necessary to separate data from interpretations if one is to avoid the inappropriate addition of research findings on quite different issues, under the general label of "environmental stimulation when young." An aura of permanent effects, attached to the critical periods hypothesis originating in studies of embryonic development, has been associated with sensory/social stimulation in general. It is known, however, from studies of institutionalized children where deprivation is thought to be operating, that negative effects are open to modification. If one adds in Bloom's (1964) statistical analysis of the proportion of intelligence acquired in pre-school years, one may arrive at an inflated picture of the significance of pre-school education because the possibility of permanent effects of a structural nature is inaccurately generalized to the results of learning.

The need to acquire academic skills in pre-school years

The need for intensive remedial training in academic skills, in order to avoid failure on school entry, was not considered a supportable argument for early education programs.

1) There is no known developmental change associated with the age of entry to school from which one could infer that intensive preparation for requirements in the first year would not need to be sustained for continued success. The "cumulative deficit" hypothesis (Deutsch, 1965) is based on the assumption that level of achievement prior to school entry rather than factors operating in home and school throughout school years is rèsponsible for academic failure and high school drop-out rates. There is no known empirical support for this position. The emphasis on pre-school programs as a solution to school learning problems appears to be partly a matter of expediency; they are seen by some as more open to modification and experiment than the formal education system.

2) Levels of expected performance on school entry originate in cultural expectations, and in patterns of home and institutional activity not necessarily familiar or meaningful to cultural minorities. There were no reasons basic to educational progress which justified imposing set standards across all children, and no evidence that slower progress in some areas of learning in itself limited the level eventually reached.

3) The basis for determining educational priorities at any level of education should not be the requirements of the next. At a time when experience with later age groups has shown the need to avoid this basis for planning, it seems unfortunate to press it on educators who have adopted a different system, which appears to facilitate progress in young children.

4) Thought needs to be given to the degree of overlap between the concepts of school achievement, intelligence and education. At this point, training in academically-oriented skills alone could not be equated with a concept of education in pre-school years, or with a concept of intelligence.

5) Academically-oriented action research programs demonstrate that under intensive training conditions, it is possible to accelerate learning in basic academic skills. They do not, however: (a) show why it is more important to do this than to facilitate other aspects of learning (even within the cognitive area); (b) measure the effects of training conditions on these; or (c) demonstrate long-term academic or educational gains from such remedial programs.

6) If immediate teaching objectives at any age level are valid in educational terms, then there will automatically be overlapping in the varieties of learning of concern. Although preparation for school is not an accepted reason for selecting immediate objectives, this does not imply that the aspects of learning affecting school achievement are not of concern for a pre-school program.

The most supportable bases for claiming some significance for planned education at an early age still appear to be those which have been put forward for a long time by the established pre-school field.

Sequential issues in learning

1) Accepting that learning is cumulative, it is considered important to initiate some co-operative effort with parents to ensure as far as possible that an initially positive direction is set for future learning - at least in areas of educational significance. Little thought has been given to the preventive contribution of pre-school education, in spite of the fact that this, rather than a remedial contribution, has been its major claim.

2) The sequences of learning which build on each other, and appear to be needed for educational progress, cross interacting areas of development rather than being restricted within each. For this reason, if no other, complete concentration on a limited set of cognitive tasks is not likely to maximize conditions for educational progress; and continuity in learning cannot be ensured through the downward extension of academic requirements.

3) Since it should not be assumed that all aspects of children's progress relevant to education would be equally retarded by difficult socio-economic circumstances, this task of prevention and of consolidation and extension of what has been learned, is still important where other aspects of learning require remedial help.

The possibility of modification

1) Where adverse environments have resulted in abnormally slow or negative learning, it has been established that this is open to modification during pre-school years. While it may be that negative effects are still reversible at much later ages it seems reasonable (in view of cumulative effects) [illegible]o assume that the earlier intervention can occur, the less difficult [illegible]ask of unlearning or accelerating learning for both teacher and [illegible]

2) There is evidence that early [illegible]ctual and general retardation responds to more intensiv[illegible]o the positive influences of normal environments. [illegible]ul planning, some help in measuring areas of relat[illegible]h and weakness, and flexibility in practical organization, [illegible] be within the scope of a qualified pre-school teacher to make [illegible]gnificant contribution in cases where the family is unable to carry the usual degree of responsibility. There seems no basis for assuming, however, that such a contribution would remove the necessity for continued support as long as there is exposure to the circumstances causing the initial problem.

5.2 Pre-school education and counteracting influences

The second set of questions about the influence of pre-school education programs concerns their relationship to the ongoing influence of family and community. How successful can work with pre-school children be in families such as Aboriginal, out of context of some overall plan for change in the adult environment?

This set of questions largely awaits empirical investigation. The following tentative position guided our approach to field work:

1) Blanket assumptions about the negative nature of Aboriginal children's home environments were not considered acceptable. Understanding particular families and communities was necessary before knowing what negative factors were operating and how these related to pre-school education.

2) To the extent that basic issues of health and family security were not under control, we thought it unlikely that pre-school education would make an effective or lasting impact.

   For this reason, the existing program of health and social welfare provided by the Ministry of Aboriginal Affairs was considered an important pre-condition for attempting to initiate educational work.

3) Recognizing cultural and parental prerogatives, the focus of our approach would be on families, rather than on intervention with children alone. The nature of work with parents which would be appropriate and possible was, however, open to conjecture and to the influence of their own responses.

4) The position taken on the above points reflected a concern that the onus for improving children's educational progress was primarily on the adult community and not on children. Increased effort on their part should be expected to the extent that negative environmental influences in both Aboriginal and white populations were reduced or counteracted.

5) Studies of the progress of minority groups indicate the importance of balancing change in the educational status of children with change in the adult community to which they bring new awareness and skills. In this case the additional complication of racial prejudice needed attention.

Although staffing in this project would not allow for planned community education, efforts would be made in the project to obtain information helpful to future community planning.

6) It was important not to confuse two ideas often associated:

   a. that in the long run, it was no use effecting changes in children without concurrent changes in the adult generation of cultural minorities, since the community needed to be receptive to new skills, values and employment needs

   b. that children's educational progress was heavily dependent on the extent to which parents could offer direct help and support

The second matter might be more open than usually assumed. There is evidence that children affect parents as well as vice versa (Yarrow, Waxler & Scott, 1971); and compensatory action research programs to date have been designed from global and theoretical viewpoints. This approach might profitably be replaced by more organized forms of the type of supplementing role which pre-school teachers play with individual families, with whom they have established a positive working relationship. Such a role could be strengthened by more conscious application of theory at points where it is relevant.

5.3 Summary : the significance of planned pre-school programs

The viewpoint adopted in this project might be summarized in the statement that adequate pre-school education is seen as a necessary but not sufficient condition for continued educational progress. Its significance lies in the place it holds in a sequence of learning experiences; not in any claim that the learning usually accomplished in pre-school years in itself is more important than what is learned at other age levels.

In the context of negative learning environments, provision for basic family needs is seen as a pre-requisite to useful educational efforts. Beyond this, the extent to which pre-school programs can play a compensatory role is likely to be heavily affected by the selection of teaching objectives; by the particular circumstances of individual families; and by characteristics of individual children and the practices adopted by individual teachers. In general, however, there seems room for optimism if children's steady progress rather than conformity to age-related expectations is the issue which is valued; and if the need for compensatory effort is directed less to children, and more to the environmental conditions which need to be remedied.

Chapter 6 PRE-SCHOOL CENTRES, PRE-SCHOOL EDUCATION, AND EXPERIMENTAL PRE-SCHOOL PROGRAMS: SOME GENERAL COMMENTS

Action towards more widely available "pre-school education" stands in striking contrast to the absence of any generally accepted definition of this term. Experimental studies have increased awareness of the range of variables which operate, or might operate, in programs planned for pre-school children. Social concerns have drawn attention, vigorously, to discrepancies in the availability of pre-school education, on the assumption that attending a pre-school centre has some constant value. The fact that, at present, "pre-school education means different things to different people, and different people expect it to perform different tasks" has been documented by Ashby (1972, p.10), and is only too evident in the tensions which exist in this field of work at present. In spite of this awareness, however, major administrative moves are being made on the basis of such personal meanings, and without some of the major choices being made explicit and resolved, overtly, either with those responsible professionally, or with communities using the service.

The relevance of this situation to the present study, and to this report, is that one needs to be able to describe exploratory work against some existing conceptual framework, in order to see what is varied, and to be aware of the meaning of this for other situations and for planning in the general field. As an earlier chapter indicates, the framework of action research is not considered effective for handling teaching decisions and educational planning.

In this position, two things will be done. Comparisons will be made at points in the report between this project and some basic features of work in regular pre-school centres, and the meaning of some common concerns in a new situation will be noted. A further basis for conceptual links is presented here, in the form of a brief comment on some points of similarity or difference between this project and established programs; also on some apparent sources of confusion in the literature, in comparing established pre-school programs with more recent ones.

A question on the relationship between pre-school education and pre-school centres might usefully be raised first.

6.1 Pre-school centres and pre-school education: synonymous or not?

In three quarters of a century of development in pre-school centres in Australia, there has been an attempt to study family and community influences on children's development and education, and to translate the resulting awareness into a useful community service, with some balanced concern for the needs and interests of children and adults. A backlog, however, of work in conceptualization and in communication of the professional content of work in pre-school centres has left a vacuum readily filled. The practical and social pressures resulting in "kindergartens" becoming "pre-school centres", and pre-school centres then being equated with "pre-school education", have been both powerful and subtle. Now, the question arises as to whether the activities so labelled should be revised to fit more neatly into the most commonly approved conceptual mould for "education".

At this point in time, it seems urgent to return attention to the real world, and to reflect on what is operative. There is a vast difference between concern that abstract words should have some common meaning and allowing that meaning most commonly accepted to rule practical events. Pre-school centres do need to be educationally adequate, and field work does need a conceptual basis in order to have both a sense of direction and flexibility over time. But it may be important to start by examining the responsibilities found to exist, and the work actually being done or attempted - whatever the appropriateness of the conceptual labels; then to evolve concepts which accurately describe all main ingredients of this work. With some operational definition at hand which allows comparison with other programs, purposes and methods can then be challenged openly, but in some other terms than whether they perpetuate an existing concept of one aspect of life.

Perhaps one of the positive values of pre-school centres is exactly that they can serve multiple purposes, which need to vary in emphasis over time, and between individuals, as changes affecting the lives of children occur in family and community. Some of the"inflexibility" in methods with which the general pre-school field has been charged of late may really be a re-affirmation of this range of purposes.

It can, then, be questioned whether it is appropriate to judge all the activities of a pre-school centre from an adult or teaching viewpoint. Activities can have educational relevance, too, without fitting inside a formal concept of education. Concern with the value of some may be shared at interdisciplinary levels, requiring some conceptual recognition. Even within the realm of educational objectives, there is more involved in decisions on the programs of pre-school centres than knowledge of what may accelerate selected aspects of cognitive development.

Thought, however, does seem needed at present for the range of responsibilities to family and community which pre-school centres can carry, and for serious evaluation and communication on the educational contribution of current programs. This is not, however, a task for this chapter. Possibly some of the reasons why pre-school centres have tried to retain a certain position of independence, in relation to the mainstream of education, will be reflected in the overall content of this project.

6.2 Points of similarity and difference between this project and programs in Australian pre-school centres which employ qualified pre-school teachers

The following comparisons must be made, of necessity, at the level of intention rather than that of action. No formal evaluation of teaching practice in Australian pre-school centres has been reported, as far as is known. This is impossible , in the absence of established criteria for evaluation on professional grounds, in relation to stated objectives. There are, however, some characteristic features of teaching concerns and methods which are built into the training of pre-school teachers, and would seem to be more frequently operative than some other alternatives. In this project also, though, there will be the usual sources of variation in the degree to which principles are operative. Practical pressures, teaching experience, and the influence of the children and families participating are some of the factors involved.

The following list is only intended to draw attention to some of the points which seem important for work with Aboriginal families, in that they allow the necessary flexibility. These are, however, considered important for pre-school education in general.

Points of similarity: some general features of pre-school education

1) Participation of families in the program is entirely voluntary.

2) There is continuing communication with parents on children's experience and response to it prior to, during, and outside the program. The roles of parents and qualified teachers are not seen to be interchangeable, but rather complementary in their cumulative effects on children's education; overlapping in their joint interest in progress; and cooperative in working out a practical program of activities.

3) It is considered that individuals have the right to an educational environment which:

   a. extends the experience which a home can provide, in ways appropriate to physical maturity, growing independence, self-control and understanding

   b. allows freedom to pursue individual interests and to develop and to use individual abilities, within the limits of safety and social responsibility

   c. sustains the relationships between environment and educational objectives which are necessary for intrinsic motivation to learn, and for the use of what is already learned

   (There is an effort on one hand to build teaching help towards educational objectives into the context of children's everyday lives, and on the other, to build into children's lives experiences which challenge and assist educational progress. This aspect of programs is noted by Fitzgerald, 1968, p.11, in a review of Australian pre-school education.)

4) A distinction is made between:

   a. a range of objectives considered of value for all enrolled

   and

   b. the aspects of learning with which any one child may need the help of a planned education program, in order to reach some minimal educational goals.

   (This means that common effects of the program on all children are not expected, although there is concern with progress in areas considered to have common value.)

5) Educational objectives are viewed in terms of progress in selected aspects of learning in children and teaching "methods" as providing those conditions for learning thought to facilitate progress with these; not specific activities which may or may not include such conditions. (Conditions would include instruction for some objectives, but would not be limited to this; and "instruction" would be approached rather differently than the word implies.)

(A draft reference statement of general areas of concern for teaching and of specific aspects of learning in each, has guided the selection of objectives in this project. This statement, however, is part of work being done under another grant and will appear, when completed, in a separate publication.)

6) There is an effort to study areas of individual competence, and levels of existing performance, and to build on to these (whatever they may be), rather than to present a common curriculum which is largely pre-determined on the basis of age.

7) When learning problems are apparent, the focus of effort is likely to be on the adequacy of environmental conditions relevant to the learning in question, and on prerequisite elements of learning, rather than on intensified instruction and expectations of effort in the areas of difficulty themselves.

8) Since there is no way, in practice, of limiting the impact of an education program to those aspects of learning and experience seen as educational objectives, responsibility is taken for ensuring the absence of avoidable adverse effects on any aspect of children's development (e.g. on social experience or on feelings towards self); and since all aspects of development interact in various ways with progress in cognitive areas, especially in pre-school children who are much more at the mercy of total, immediate experience and much less in control of their physical and emotional reactions, there is also planned attention to any area of development which appears a priority for further educational progress, or for maintaining a positive group learning situation.

9) A basic responsibility is considered to be that of maintaining (or trying to create where necessary) a basic set of physical and psychological conditions, known to be conducive to general development and cognitive learning:

for example: in the person - a state of physical health, the absence of fatigue or psychological stress (with referral through parents where necessary for the early treatment of any problems); in the physical environment - constructive outlets for energy, variety in sensory stimulation, safe physical conditions; in the social environment - affection and respect from others, the absence of adverse comparison and judgmental criticism, limits to behaviour which maintain a sense of security, adult expectations relevant to physical maturation and previous experience.

10) Evaluation is primarily a matter of the teacher's ability to create a generally positive setting for learning and those conditions needed for immediate teaching objectives. Awareness of children's progress is seen as a prerequisite to further planning and the outcome of home/pre-school centre efforts, rather than a basis for evaluating the adequacy of the program. On the other hand, lack of progress is seen to require initial attention to the planned education program.

Points of difference: some practical matters

In the following ways, this project departs from patterns of work in regular pre-school centres:

1) initiating contact with families, rather than enrolling those who come, and taking time to build communication before starting any educational work

2) teaching more oriented to supporting parental roles and home contributions to children's development, while providing a bridge towards regular pre-school services and peer group experiences

3) more time spent for personal contact, consultation and education with parents individually, than is usually possible or planned

4) a teaching program which carries more than the usual responsibility for what other children may learn more automatically, at home

5) more intensive, individual teaching contact for shorter periods, rather than the longer time in the usual group with a teacher-child ratio of about 1:25

6) more emphasis on adult-child rather than peer-group contact (depending on levels of development found)

7) more specific definition of aspects of learning for teaching effort, and the use of tests to help diagnose areas of more and less advanced progress

8) a temporary program to fill what should be a decreasing need (in the long term), as families find themselves in circumstances in which they can give more of the usual parental help to children

9) work in homes with families, rather than with groups in a pre-school

This summary may serve the purpose of some quick comparisons on practical work. It is hoped, however, that the overall report indicates some of the very different experiences and opportunities of such programs, and particularly those related to the chance to think and to learn across cultural experience and racial origin.

6.3 Points for thought in current comparisons of pre-school programs

New experiments with pre-school programs have had positive effects in raising important questions and challenging long-standing assumptions. In other ways, however, their effects are less helpful, in that far less attention has been given, it seems, to understanding existing programs than to designing alternative ones. In addition to the cumulative effects of repeating, in the literature, descriptions of "traditional" programs which, if traced, may stem from severely limited first-hand contact, the labels in current use in action research reports tend to carry a value loading which operates with systematic bias. As a basis for any thoughtful modification of established pre-school education, or a way of creating receptivity to new ideas, there seems a need for some change.

Problems of communication on the professional content of established programs have led to the bases for comparison frequently being limited to two sources of information: 1) observable activities in pre-school centres and 2) expressions of value regarding these activities and a certain range of teaching concerns. Questions as to why these activities are planned or valued have received much less examination, and evaluation by others has tended to be largely in terms of their direct stimulus value for selected aspects of cognitive development, as measured by available tests. This is not always the reason for their inclusion in the program.

The educational approach taken in this project suggests that comparisons of professional work at the level of program "types" is inappropriate, and tends to be misleading. It allows neither care in applying what scientific knowledge is available, nor freedom for the creative task of doing so with respect for individual differences and local situations. Adding a major cultural variable, as in this project, increases the need for maintaining this flexibility.

Since discussion based on such programs has been accumulating, however, there is a need to try to reduce some existing confusions. The following notes seek thought for some of these.

Enrichment programs and established pre-school centres

One of the many sets of conflicting pressures to which pre-school teachers are subject at present concerns the value of "enriched" environments. A good deal of effort in regular pre-school centres is invested in providing such a setting, and a degree of freedom to enjoy and use it. The type of programs developed in initial anti-poverty efforts of the Headstart movement in the United States emphasized this aspect of pre-school education, as a result of work by Hunt (1961), Rosenzweig (1962), Deutsch (1963) and others.

Now, however, there is some evidence that the "enrichment approach" to pre-school education does not solve the learning problems to which compensatory programs were directed. Other types of programs have been shown to be more effective, in terms of immediate test results: e.g. Karnes (1970), Bereiter & Engelmann (1966), Smilansky (1966).

At the same time, pressures for social equality in Australian pre-school education increase; there is widespread action to make the more stimulating environments of regular pre-school centres available, specifically, to children in relatively deprived socio-economic circumstances, and possibly with similar learning difficulties.

Many unidentified variables may have made the results of Headstart programs ambiguous. Two points relevant to the general pre-school field might be made here, in sorting out conflicting pressures.

First, the relationship between programs in U.S.A. which mushroomed from an enrichment approach and those of the mainstream of pre-school education is not as strong as the current literature would seem to infer, with some frequency.At the time when Headstart programs were being developed, concern was expressed about lifting the setting and usual activities of pre-school centres out of context of help in their use by adequately qualified teachers. This meant that there was little relationship between the setting provided and the level of stimulation which children had learned to process intellectually, or to handle behaviourally. Klaus & Gray (1968) describe quite gross adjustments seen to be needed in these areas.

Further, the "enrichment" offered appeared (to a number of Australian observers) to be a greatly increased level of sensory stimulation at one time - to a rather distracting level - rather than variety over time, in relation to children's developing abilities and interests. The more controlled and spaced presentation of stimulation is probably more characteristic of the established pre-school field, at least in Australian programs which would be considered adequate.

Lack of recognition of the difference in the context in which enrichment was presented, as well as of the more limited (and difficult) purposes of compensatory programs, could lead to some unwarranted de-valuing of environmental variety and freedom to explore it, as variables of merit in the educational experiences of pre-school children. A further reason for concern with this was put forward in the previous section of this report (see p.46:3).

These notes are not, however, an argument for or against either enrichment or structure in any blanket terms. It is suggested that the main point is one of environment-child relationships, not just that of stimulus variables. On the side of regular programs in more privileged areas, expectations of cognitive effort may need to be examined, if access to an enriched physical and social setting is not to be taken for granted, and children and teachers become dependent on an increasing range of sensory stimulation and special equipment to forestall boredom,and maintain group control.

For children whose first-hand experience and "processing" skills are much more restricted, teaching help may need to precede stepped-up levels of stimulation. This is one of the questions for this project.

The consequences of extending the peer-group and play situation of pre-school centres, without an inbuilt education program made possible by professional training, is a matter for serious study and has been in question for some time. A number of variations have been tried. There is, it appears, in Australian society, a growing tendency to replace the naturally-formed social contacts and spontaneously-explored worlds of children with adult-created situations which also meet the needs of parents. When this is done, children may no longer be able to pace their own "intake", nor to receive the necessary teaching help in taking whatever may come.

One useful outcome of experiments with enrichment may, then, be a reminder of the doubtful value of replicating pre-school education in terms of its observable features, and of the inaccuracy of interpreting it at this level.

Concern with "all-round development"

In spite of a good deal of recent criticism of the emphasis on "all-round development" in the general pre-school field, this position has been re-affirmed over the last few years. For example, Lyon et al (1968), in a reply to issues raised by de Lemos (1968), stresses the importance of a more balanced set of objectives than some contemporary programs would advocate.

This concern which is widely shared, both here and overseas, tends to be misinterpreted. The "child development approach to education" has become a cliche with emotional overtones. In currently increased contact with the mainstream of education, those who see value in this approach have been challenged to pin down what they mean more adequately. Usually, however, the position is just re-stated in similar terms, and the issues remain unresolved.

This project also has an interest in overall development. A few comments here may help to crystallize the reasons, and to provide a means of testing the thinking of others, on this issue.

The usual interpretation in the literature of the position taken in the pre-school field is that there is a spread of teaching objectives across all areas of development, and that concern with these is then, of necessity, held at a fairly general level. For instance Karnes (1970, p.60) describes the major goals of the "traditional" nursery school program as promoting the "personal, social, motor and general language development of the children". Bereiter (1966) writes: "The mistake that seems to be inherent in the "whole child" point of view as it exists among educators is contained in the assumption that this concern requires a broad, unfocused educational program that recognizes no priorities and tolerates no omissions".(p.11) . . . ."The teacher who tries to meet all the children's needs is bound to extend herself beyond her range of competence - into realms of social work, psychotherapy, and even medicine. Not only is she likely to do unwitting harm, but she will be shirking the full-time job she has been charged with - that of promoting learning." (p.12).

A number of interesting and important points have arisen from the concerns of such studies; de Lemos (1971) summarizes some of the main questions raised. Along with awareness of the need to give serious thought to these issues, there is also a concern at the superficiality of these descriptions of traditional programs which, if traced, may be found to rest on very limited first-hand knowledge. Assumptions have been made about the character of Australian programs in particular. (e.g. Moffitt, 1971 quotes Weikart , 1967, and de Lemos, 1971, quotes Bereiter, 1966.) The cumulative effect over time tends to be highly selective and increasingly abbreviated.

Though programs are described from one viewpoint only, labels are attached at a general level. Whatever the nature of the program, however, it seems that discussion of conditions affecting the acquisition of specific cognitive skills should be detached from discussion of who should be teaching what - where and when! That is a decision of a very different kind, requiring a different set of information and the assumption of some quite different responsibilities.

To deal, however, with "all-round-development", as far as possible here:

1) A distinction is made in pre-school education between a wide range of teaching concerns which apply in general, and against which children's progress needs to be studied, and the much more limited set of immediate priorities for planned attention at any one time. Teachers, therefore, are certainly not trying to deal with all aspects of development for every child, at once.

2) Some aspects of children's development are provided for by planned attention to constant aspects of the physical setting, and of teacher training; also by the general organization of the program and by preparation prior to children's arrival.

3) The reasons for attention to various areas of learning differ considerably, as does the nature of the attention given. "Concern" does not always mean concern with a teaching goal, in the sense usually meant at other levels of education. It is the tendency to group issues under a descriptive, rather than a functional label, which obscures these purposes. The task for pre-school education seems more one of differentiating concerns now grouped under social, emotional, physical or intellectual development, in a way which indicates the content of the concern and the work to be done. This, rather than forgetting previous insights (also communicated from research on children), in the process of trying to incorporate new ones, may help towards a real resolution of conflicts and not to limiting awareness. At least this would allow a realistic look at some practical problems.

A few examples may illustrate the current source of communication problems and perhaps of some lack of clarity in teaching practice. It may also suggest a way of reducing these.

Concern with "social development" may cover:

* helping children to learn those social requirements necessary to maintain a constructive social learning situation

* taking responsibility for social learning resulting from the natural contingencies of peer interaction.(Since the peer-group situation is often a new experience which can make considerable impact, this does seem necessary. Attitudes to social learning situations are involved.)

* helping children differentiate social perceptions

* creating a climate which evokes and sustains educational effort - interest in others' ideas, enjoyment of achievements, hearing another viewpoint, sharing general knowledge

Other content could be quoted here, but these may make the point. With older children, positive responses may be established; pre-school children are in the process of learning them. Individual differences are great.

Concern with "emotional development" may mean:

- protecting children from excessive frustration which may build a sense of failure, or hostile feelings
- maintaining conditions which develop positive attitudes and feelings towards adults, so that educational communication can occur
- referral through parents for help in reducing sources of apparent psychological stress
- helping children to face up to the consequences of their own acts
- creating opportunities to extend the range of positive feelings which children may have experienced

Concern with "physical development" may cover:

- providing constructive outlets for energy
- aiding the development of specific physical skills
- sharpening sensory skills - for instance, visual acuity
- allowing time for physical exercise
- ensuring that equipment is relevant to physical maturation

(Cognitive development is discussed under the next heading.)

These examples may illustrate the communication problem which is of concern in these notes. The grouping gives no clues as to the reasons for giving planned attention to any one task.

A teacher at any age level can hardly avoid dealing with the same range of concerns. They are often those which require a response when issues arise, rather than some teacher-initiated action. In pre-school education, however, thought is given to the nature of the response which will be helpful to young children, and to its probable effects on other aspects of behaviour and learning. Matters which can be separated in theory are sometimes quite inseparable in practice; the only choice possible is whether to ignore them or not.

Cognitively oriented? - a matter of emphasis or content?

Related to the previous point is the fact that "traditional" pre-school education is on trial at present, for underestimating cognitive goals and being over-concerned with social and emotional issues. Admitting the range of concerns just discussed, this point needs more careful study than it receives when criticism in this direction is met by assertions of equal concern with intellectual development. It is possible that the real differences are in the content and object of thinking, rather than in the emphasis given to cognitive development. This matter really needs to be discussed on the basis of data. Again, some differences may arise from the fact that, until recently, pre-school centres have not been faced with the task of helping children with the acquisition of early cognitive skills which other children bring to the group situation.

How much might the impression conveyed by established programs be due to the following?

1) In pre-school centres, perceptual differentiation and cognitive effort are frequently directed to the immediate and real environment (both social and physical), and to children's impulsive or thoughtful responses to it, rather than to symbolic representations of their world in books, pictures, or teaching materials.

   Some interesting questions centre round this difference. The sequencing of stimuli which is possible at a vicarious level may simplify classification and the acquisition of concepts, but not necessarily the ability to conceptualize; it may also create problems of motivation and of generalization. This may matter much less in relation to acquiring and using understanding of the physical environment than it does to acquiring and using understanding of the human environment. Further, it seems fairly well established that complexity of stimuli tends to involve cognitive effort rather more than a "pre-digested" quality.

2) There may be more acceptance of positive variation in the combinations of cognitive skills acquired, in regular pre-school centres.

   While it is not suggested that minimal levels of certain skills are not essential in certain environments, there is no evidence that these are better learned at earlier than at later age levels, as long as certain prerequisites are in order; neither is it evident that direct instruction in advance of formal schooling is essential for children from normally positive environments. Some balance of interests, in relation to what formal education is able to provide, may be important to retain.

   Reflection, exploratory thought, the task of distinguishing [illegible]ality and phantasy; invention, imagination, the ability to formulate meaningful questions, make comparisons, be aware of significant relationships, to recall events accurately - these all receive a good deal of attention, and would appear to have both immediate and future value. Something of the emphasis in pre-school centres may be due to awareness that the spontaneous expressive and imaginative tendencies of young children, relevant more to the arts, perhaps, than to the sciences - which require a somewhat different brand of creativity - can either be preserved and developed or fairly severely disabled in pre-school years. These are not easily recaptured.

Definitions of intelligence could, then, be a little richer than the items of standardized tests suggest. Work seems needed, however, on defining variables more concretely, thinking out prerequisites in cognitive learning, and being able to recognize valid evidence of progress. At present, it may be that pre-school programs do need some increased understanding of cognitive concerns. Possibly, however, there is a parallel need to recognize the very limited help which current theories and measures of intelligence give with teaching questions, at the pre-school age level.

Self-initiated learning activities: a less effective method ?

At a time when there are reactions throughout the formal education system to the procedure of instructing a captive audience in a common body of knowledge, it seems strange that the greater freedom of even younger children should be so much in question. Evaluation of pre-school programs as adequate preparation for school has not, it appears, been accompanied by any equivalent evaluation of conditions for learning in early school grades. There is, also, a tendency to assume that all children should fit a school program which has proved useful to some (Gordon and Wilkerson, 1966).

In spite of this, however, questions of the effectiveness of programs emphasizing self-initiated activities, for developing certain aspects of cognition, remain. Although there appear to have been some changes in the pre-school field arising from re-examination of the general value of play, the emphasis in programs is certainly still in this direction. Self-initiated activity has been challenged as one of the "sacred cows" of the pre-school movement (Goldman, 1973, p.29).

This would be much more true if it were seen as a method of teaching specific cognitive skills. In Australian pre-school education, however, self-initiated activity (or more accurately, self-directed activity) is not seen to serve the function of a method of teaching or learning at all; rather it is the context for or result of these. Any one of the following may be involved in the balance of freedom and control, in the more usual kind of program.

1) the opportunity to help children learn something dependent on the presence of freedom (e.g. voluntary involvement in learning situations, self-control, responsibility-taking, interest in discovering their own abilities and the point where further learning is needed; ability to use materials creatively).

2) a personal context for teaching perceptual, cognitive, or expressive skills (e.g. one may learn to differentiate, analyse, compare, and classify, in the context of an interest in sand play, block building, playing house, or watching snails; one can communicate feelings and experience through singing, painting, or dramatic play. It would be clearer if these concerns were not grouped under the frequently-used category of "extending children's interests", but the educational issues were defined.)

3) a general condition in the program's organization found to be of practical value (e.g. in allowing the teacher to vary the degree of help to individuals, depending on immediate objectives and ability to proceed with these independently; a chance for children to regulate energy output and fatigue, according to a wide range of individual differences; an opportunity for teacher observation of progress in behavioural areas which reflect the learning and use of prerequisite skills and abilities; the chance for children to consolidate previous learning and to seek their own cognitive "match" in new activities.)

The role of education in assisting progress towards independence and self-determination is of particular interest to this project, in relation to both adults and children. Activity which has a purposeful, self-directed quality, but is free to vary in its object, involves awareness of possibilities and of sources of information, the formulation of some idea and the maintenance of a cognitive set in pursuing this. It can also include evaluation against some accepted criteria. Bringing one's own behaviour increasingly under the control of thought, and understanding its implications for others, would seem to be goals of some educational significance. In pre-school education, however, more help with the "processing" of information and experience may need to be given.

The questions surrounding the balance of freedom and structure in education programs are, then, attached to specific varieties of learning rather than to an overall method or to any one age level, and these relationships are considered important to pursue.

Some of the most obvious variables in the increased effectiveness of more focused teaching effort for some aspects of learning do not appear to have been identified. One might ask whether "research" is necessary to demonstrate that if one works harder, more often, at less things, with more help, and is clearer about some immediate goal and the nature of the learning involved, learning is likely to be accelerated in this specific area ?

The apparent reversal, in interpretations by others, of the methods and content of pre-school education seems to illustrate a major point of difference with the mainstream of education, and the reason for concern with retaining a degree of independence, in spite of the need for help in some areas. It is difficult to put one's finger on the actual problem, but one suspects it is a very major and pervasive one; and that it may reflect the real meaning of an approach to education which is child- rather than subject-oriented. The same issue is represented by the question raised on Aboriginal education at the outset of this report. It is a matter for the starting point for thinking. The nature of the change expected in the individual learning needs to be defined before one can examine its educational validity; seek knowledge and design activities relevant to this; and understand what one is asking from the learner.

SECTION III: INITIAL FIELD WORK

Chapter 7

THE PRACTICAL SETTING

7.1 At the time this project was initiated, no agency in either pre-school or Aboriginal fields of work was officially taking responsibility for planning for the educational needs of children from Aboriginal families in Victoria.

The Department of Health (Vic.), Maternal & Pre-school Division

The position of the Maternal and Pre-school Division of the Department of Health, Victoria, allows it to subsidize existing pre-school programs initiated by local groups, but not to establish new ones. The practice of communities themselves taking the initiative to develop early education services seems, in principal, to hold an element of local involvement and responsibility which is important, particularly as both capital grants and subsidies covering a teacher's salary are provided through the Health Department. In two ways, however, this system fails to reach children from some families where a pre-school teacher could be particularly helpful. Some areas miss out altogether as the majority of families living in these lack the resources, knowledge, skills and personal freedom to undertake such a community task. Secondly, established pre-school centres do not make a practice of studying the extent to which all families in the local area are served. Again, the initiative to create educational opportunities for children is left with parents who differ markedly in previous contact with planned pre-school services, and in their ability to meet the fees usually necessary to cover the expenses of a regular pre-school centre.

We knew that even in communities with established pre-school centres, many Aboriginal children had unequal chances of early educational help from a qualified teacher.

The Ministry of Aboriginal Affairs (Vic.)

A re-organization of State Government provision for the Aboriginal population of this State occurred during the early stages of work. The newly-established Ministry of Aboriginal Affairs, Victoria, quickly initiated widespread efforts to improve the adverse housing, health and social conditions with which many Aboriginal families were faced. With these as priorities, no plans for pre-school education were in hand, and collaboration between the Monash University Planning Committee and the Department of Aboriginal Affairs seemed profitable. In 1971, however, the Ministry decided to intervene directly in pre-school activities for Aborigines in Victoria, and appointed two pre-school officers to establish contact with families with young children. This move changed the future administrative situation in relation to some carry-over from an experimental period of work. The outcome of this situation will be discussed in later sections of the report.

7.2 The part-Aboriginal pre-school population of Victoria

An estimate given by the Ministry of Aboriginal Affairs to a meeting of pre-school personnel in August, 1971, set the number of part-Aboriginal children of 4 years and under in Victoria at 1,078.

In relation to the total part-Aboriginal population of this State (approx. 6,000) the pre-school population forms a very much higher proportion than the comparable age group in the total community. There is every indication that the number of part-Aboriginal pre-school children living in proximity to non-Aborigines is growing. This creates a significant group whose needs and those of their parents must be considered in educational planning. There is a parallel need to consider how this might affect work with non-Aboriginal families.

The task involved in organization of any pre-school services differs considerably according to region. In some towns, there are concentrated numbers; in areas such as Gippsland, a relatively small number of families is scattered through an extensive area.

7.3 Areas selected for exploratory work

Contrasting country and metropolitan settings were chosen for initiating experimental work. A concentration of Aboriginal families was known to exist in both rural and urban areas, and expected differences in the extent and duration of contact between Aboriginal and white communities interested us, in relation to educational progress. Since, in Victoria, no full-blood Aboriginal groups carrying on a tribal life still existed, the questions needing investigation and the practical situation for field work differed from those in some other States.

Exploratory contacts with Aboriginal families, with the Ministry of Aboriginal Affairs, Victoria, and with a small Advisory Committee, guided the Planning Committee's decisions on areas selected for field work. This was initiated at Swan Hill in January, 1969, and in the metropolitan suburbs of East Preston, Reservoir and West Heidelberg in March, 1970. The next section of the report briefly describes what was known then of the two settings in which pre-school work was to be developed.

The Swan Hill setting

A prosperous country town on the northern border of Victoria, some 250 miles from Monash University, Swan Hill has a population of approximately 7,000. Arriving by road, one is greeted on the outskirts by a notice board claiming the title of Victoria's premier town. Centred in an area of fruit-growing, sheep and mixed farming, much of the employment available to Aborigines is seasonal. For three months or so, at the start of each year, activities in many Aboriginal families are organized round fruit-picking; children from several families may be left with grandparents while mothers also earn what they can. Light industries such as fruit canning, and the town's steady tourist traffic add to employment opportunities; but there is no certainty for Aborigines about obtaining regular work.

At the time of initial contact, fringe-dwelling Aboriginal families, previously housed in tin huts on the river bank on the outskirts of the town, were being re-housed within the town itself, at a standard comparable to that of the white community. This was part of a major effort by the Ministry of Aboriginal Affairs, Victoria, to improve the housing and health situation of Aboriginal families. By 1969, a number of families had been physically absorbed into the town, in homes scattered over quite a wide area, rather than concentrated in a particular section. Some families still remained in an obvious fringe-dwelling situation, their living conditions presenting a strong visual reminder of community responsibilities yet to be met.

Re-housing programs such as that carried out at Swan Hill, within a relatively short period, solve some problems but tend to create new ones. Some effects of re-housing on family life, including children's educational experience, are noted later in this report. It was our responsibility, however, to deal with the realities of existing conditions and to assess the possibilities of some co-operative effort over children's education.

The Aboriginal adults in Swan Hill used as a meeting place a building provided by the Ministry of Aboriginal Affairs, Victoria. Recreational and educational activities for adults, and meetings of a local Aboriginal Assembly were encouraged and guided by an Education Officer and Aboriginal Welfare Officer employed by the Ministry. This centre also provided a source of help to Aborigines with employment and personal problems. In addition, a Health Sister and visiting Social Workers also employed by the Ministry, operated from this base.

Through existing activities at Wandarrah (or "meeting place") as the building was named, preparatory contact with Aborigines was made and Monash University project staff were invited to work in the Swan Hill area. The Centre provided a physical base for starting work and an entree to contacts with Aboriginal families with young children. It also seemed that the Ministry program of health and social work there would ensure attention to the basic needs of families; thus some educational activities for children and parents might be developed to advantage in this broader context of overall concern.

On the matter of contact between Aboriginal and white communities in Swan Hill, it appeared that, on both sides, there was a range of attitudes and experience. Some evidence of discrimination in favour of the white community was known to exist; there was also active effort on the part of some citizens to support attempts by the Aboriginal population to increase their independence and to deal with their own problems. While a few Aboriginal families moved freely across cultural boundaries and functioned successfully in two ethnic groups, we knew that, for the majority, unknown members of the white community would not be automatically accepted, and that much time could be needed for establishing positive communication.

This situation was reflected in the fact that only one or two Aboriginal children had attended either of the two subsidized pre-school centres or the play group for younger children already operating in Swan Hill. Plans for work in this project included developing contacts with existing pre-school services in the town, and understanding why they were not used by many Aboriginal families with young children. A high degree of mobility in the Aboriginal population made it impossible to tell how many parents and children might participate in some other type of educational program. At that time, however, there were 18 families (with 41 children under school age between them) with whom the staff at Wandarrah were in contact.

The Metropolitan setting

Any clear-cut picture of the part-Aboriginal "community" of Melbourne was difficult to obtain. A study by Barwick (1962) indicated a good deal of factionalism among the three regional groups of Aborigines represented: those from Gippsland, those from the Western District, and the Cummeragunga people who had crossed the Murray from New South Wales. The latter group were then the leaders in activities consciously Aboriginal; in these they had the highest status; then came the Western District people and then those from Gippsland. Barwick observed that as more part-Aborigines settled in Melbourne, these old regional loyalties were slowly breaking down, inter-marriage and economic differences cutting across older ties. A more general 'black' identity appeared to be emerging. The 1956 Commission into Victorian conditions of Aborigines under McLean had recommended dispersal and compulsory absorption into the community. This appeared to have brought about a state of economic absorption without assimilation.

The situation in 1970 was a rapidly changing one, since the newly constituted Department of Aboriginal Affairs was formulating new policies. How much remained of some distinctly Aboriginal orientation in part-Aboriginal families in urban areas was unknown. Yet this was not at all an academic point; it had important implications for our project. If a majority of the part-Aboriginal families seek assimilation into the white community, the project should support them in achieving this goal. Alternatively, if they wish economic absorption and economic security while maintaining a very strong identification as Aborigines, this could have difficult implications. We thought it likely that individual families might vary considerably along this dimension.

The location for a Metropolitan program was, however, mainly determined by the distribution of Aboriginal families throughout the suburbs of Melbourne. A breakdown of available information for the North-Western, South-Eastern and Eastern - Outer areas of Melbourne showed that of a total of 45 metropolitan families known to the Department of Aboriginal Affairs, 35 lived in the North-Western sector and 23 of these in the suburbs of Preston, Reservoir and West Heidelberg. The number of children under school age in these 23 families was thought to be about 30.

Little was known of the educational needs of the children in these families. Two other sets of information suggested that action in these suburbs would be useful. A number of the families were known to have the kind of multiple social and economic problems which usually prevent parents giving any consistent attention to children's early educational experience. As at Swan Hill, however, the Ministry of Aboriginal Affairs was employing staff to help families reduce these problems. A qualified nurse, social workers, and a housekeeper, - some Aboriginal - were already in contact with the families in this area. We were, therefore, reassured that we would not be attempting to initiate educational work in isolation from some overall program to support the general well-being of the families concerned. Any education program to be effective, would need solid underpinnings of this nature.

An initial survey was made, too, of existing pre-school facilities in the Preston/Reservoir and West Heidelberg areas. While these districts contained several Baby Health Centres, and six Primary Schools, adequate plans for pre-school education were lacking. For nine families, there was no kindergarten within walking distance; for a further 6, the readily accessible subsidized kindergarten could offer no possibility of vacancies, its waiting list being 97. Three more families were within reach of a kindergarten attached to a Catholic school; some vacancies were expected here for the following year. A Methodist kindergarten somewhat accessible to the remaining five families expected a few vacancies for younger children late in the year, but none for four-year-olds again until the following year. In all cases, had enrolment been possible and sought by Aboriginal parents, it seemed highly likely that some financial help towards fees would be needed and additional assistance with appropriate clothing and transport.

As a result of this preliminary survey, the areas of East Preston, Reservoir and West Heidelberg were selected for a second project effort.

In contrast to Swan Hill, there was no established group activity evident among the known Aboriginal families and the extent of any type of contact between them was unknown. The Aboriginal Advancement League had its headquarters in the adjacent suburb of Northcote and we considered the possibility that it might provide a positive nucleus of contacts within the metropolitan Aboriginal community. At this time, however, the League appeared to be coping with internal conflicts and not in a position to extend its activities or give thought to pre-school education. It represented only one section of the Metropolitan Aboriginal group, another faction bitterly rejecting it. Any close association with the League on our part would, at this time, have incurred a similar rejection by some families of any program offered. This situation was confirmed in discussion with others, including the Aboriginal Social Worker on the Advisory Committee involved in early project planning discussions.

The general characteristics of the north-western sector in which it was decided to initiate work include a very high proportion of Housing Commission homes. Streets are pleasantly wide and houses mostly in reasonable order. Apart from a major suburban shopping development and a creek creating a physical barrier between sections, the area at first appears somewhat featureless. There is limited scope for interesting activity outside the home, and the delinquency rate is one of the highest in the Melbourne suburbs.

It seemed likely that most Aboriginal families established in Housing Commission homes would be less mobile and more in a position to participate in planned educational activity. We had some indications from contacts made outside this project that having some guarantee of a "roof over their heads," parents in this area were not likely to give up this new security.

In view of the widely scattered distribution of families with pre-school children, it was not feasible to envisage a program built around a physical centre; a high degree of mobility on the part of any teacher would obviously be needed. At the same time, impressions gained from this initial survey suggested that an education program of some kind for these families was an urgent need.

What action was appropriate?

Early contacts with the two areas selected for action made it clear that their regular pre-school services were not an appropriate starting point for educational work with these families. The gap between the social experience and the information held by many Aboriginal families and the non-Aboriginal adults using local pre-school centres was far too great to allow comfortable interaction. Further, sending very young children to a pre-school centre was a cultural pattern evolved in the white community, in response to needs in parents and children resulting from quite different family experience. We could not assume that such activity would be needed, understood or valued by Aboriginal parents. Only one or two children from these families had attended the regular pre-school centres to date; it was also known that Aborigines set considerable value on young children being at home with their mothers, and being taught by Aborigines. Even at school age, required attendance at white-oriented educational institutions was still a source of friction between Aboriginal families and educational authorities.

Quite apart from children's educational needs, awareness of the position of their parents required, then, that we think out some revised concept of pre-school education which recognized major cultural differences while maintaining adequate educational standards. Immediately we were faced with the question, "To what degree do cultural values relevant to education differ between these families and the general community?"

The first task, however, was to find ways of establishing contact with Aboriginal parents and to begin to build up a degree of trust and positive communication across cultural and experiential barriers.

Metropolitan
program

Note: Metropolitan program illustrations

Photographs illustrating the Metropolitan program in this report were taken by Miss Considine during regular teaching sessions, and used as a basis for communication with the families themselves.

Chapter 8 ESTABLISHING COMMUNICATION : THE NATURE OF THE TASK (as understood by project staff)

How easy or difficult would it be to establish positive contact with part-Aboriginal families? This was unknown. The experience of others made it clear that we were unlikely to achieve it without sensitivity to how situations might be interpreted by them. But could we as non-Aborigines act with sufficient understanding, early in the project, when to achieve such understanding was one reason for the project's existence? It seemed likely that awareness on our part of the reactions of parents would be less difficult than understanding why these were occurring.

With no previous opportunity for direct contact with Aborigines, our own personal reactions were hard to anticipate. It was likely, however, that they would be important. We knew that what would count most in any approaches we initiated would be the nature of our usual ways of interacting with other people - perhaps with a reminder to ourselves that visual cues and actions were likely to carry far more weight than words. It was, however, our possible responses to what others might do, and the situations which we created for interaction, which required some thought in advance. We tried to crystallize our thinking on educational and social concerns sufficiently sharply to allow our spontaneous behaviour to express these concerns; also to have a sense of direction which ensured that cultural problems were not resolved at the expense of educational ones. We were aware that this could happen.

Since there is limited time, in most cases, for preparation in embarking on new areas of field work, this report includes extracts from working notes from this project in order to suggest some of the points considered to need thought before direct involvement with Aboriginal families. They may be of help to teachers and others facing similar practical tasks.

The following informal notes cover :

1) the main points which we had in mind in approaching initial contacts
2) the practical situations in which contacts were made
3) an attempt to conceptualize practical issues in interaction in terms of behavioural learning theories
4) impressions and reactions from initial interactions

The extracts represent an approach to the setting at Swan Hill, following preparatory talks with the Aboriginal Assembly there, the Director of Aboriginal Affairs in Victoria, and the Ministry Education Officer at Wandarrah. Experience in this setting helped the following year in contacting families in Melbourne.

8.1 Reflecting on cultural and social expectations and concerns

Of first importance, recognition that a position of equality, on purely human grounds, needs to be achieved. This seems far more a matter of immediate personal respect for another person than an abstract respect for another culture. If this is in order, freedom to act in culturally different ways is automatically preserved. This basic respect for individuals - adults or children - is a tradition which is fostered in the established field of pre-school education; the problem is to understand what it means in interaction with Aboriginal families. Differences between families may mean, as usual, that there is no one answer.

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Establishing communication - a sense of trust - could take months, a year. We must be prepared to wait, this is something which can only be given. But if acceptance in one group might not be expected quickly, neither should we anticipate rejection. A fairly matter-of-fact approach might help; a clear, brief statement of the reason for being there, without trying to justify one's presence, as though it might be rejected. However, it might! - and this we may need to accept. A history of prejudice is met by prejudice. From the Aboriginal viewpoint - and sometimes from ours, "white" is not "beautiful."

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How much does the collective past of a cultural group influence interactions in the present, in comparison with the weight of immediate experience? It can only do so as it has been met directly in various ways in the lives of the present generation. Its influence is likely to be on expectations - and that of immediate experience on whether these are fulfilled or challenged. Opportunities for positive personal interaction across cultural boundaries, then, are important if positive change on both sides is to occur.

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Interaction must not be forced by the way in which the program is organized. It is dependent on physical proximity but this should be flexible. There should be no "captive" situations. We need to create one physical spot where we have a right to be - and can be easily approached - but our task is to invite contact, to offer resources, not to press for interaction. If this is not voluntary, and prompted by some common interest, we will have achieved nothing.

A focus on children, not on adults, creates a possible meeting ground. Some neutral territory for contact is important, where parent can meet teacher free from the weight of being known as a "problem family" in the sense of needing help with some of the more obvious aspects of life. We will need to make sure that parents know that in the pre-school program we do not have or want general access to the social work records kept by Ministry staff. If we need confidential information about something affecting our work with children, we should talk directly with parents, or with others involved, so that they know what we know and why we need to know this. This seems basic to the possibility of building a situation of trust.

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We need to avoid communicating any expectation that we should have early access to people's homes. Just having a house to care for is a new experience for many - associated with the power and control of others and their own current position of inferior status. An official visit is likely to evoke anticipation of the need to conform to some requirement, imposed by the majority group . . . possibly anxiety or hostility from a feeling of being inspected. None of these responses will set a positive basis for communication, but there are signs that they may have a low threshhold.

Families are probably exposed to attention from a number of different official sources. We will need to avoid adding to pressures - to wait for the privilege of contact on home ground.

What is the real issue in the "hand-out" problem? Withholding resources obviously needed to cope with matters of family survival cannot be the solution. The basis of self-respect (as distinct from self-confidence) should not be dependent on whether or not one needs help from other human beings. Everyone needs this at times - it is not a sign of strength to refuse to admit this, particularly when others are affected. There is something worrying, unsound about the premise that a positive self-image for Aborigines is dependent on their demonstrating to themselves or others an ability to do everything for themselves. Their ethnic self-respect is the responsibility of the white community. Increasing practical independence, socially and economically is important - but more likely to be accomplished by support in facing realities, and by being aware of some attainable intermediate goals, than by meeting a lack of honesty in the evaluations of the white community, which eventually will be recognized. It is this kind of protection that seems to hold the essence of paternalism.

At this point, the "hand-out" question seems much more a matter of HOW help is provided and WHY it is provided, than how much is needed or from whom it comes. But this may not be so from an Aboriginal viewpoint and such distinctions might be unrealistic in practice. A well-established and very global response is likely.

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8.2 Reflecting on educational responsibilities

Awareness of educational responsibilities complicated cultural issues. Since the former were the reason for the project, further thinking in advance was needed. What kind of pre-school education program would be helpful to Aboriginal children? When it comes to any learning problems, is the origin of these in any way distinctly Aboriginal?

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There is a basic problem to be faced in initial moves. The concept of "pre-school education" has become almost synonymous with "attending a pre-school centre," in many people's minds. From this position questions for negotiation in new situations tend to centre round material resources and issues of "running a pre-school group." We know that some of the most active Aboriginal parents have been interested on this basis. In concern with the need to respect cultural differences and encourage responsibility-taking, others have supported the idea. Positions of ownership, increased autonomy and control are well overdue for Aboriginal adults. This makes it specially difficult to keep the planning of a pre-school education program focused on children's needs, and to create an opportunity to study their progress before deciding what teaching situations will make it possible to give appropriate help. What kinds of things do these parents specially want their children to learn? Individuals - both children and parents - may differ markedly in how much their previous experience allows them to use a group learning situation. So far, we know little about the kinds of help parents have been able to provide at home. As far as we know, they are concerned that their children learn what is needed to operate successfully in the general Australian community. It is unrealistic to expect that this could be achieved by the setting up of parallel pre-school services.

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If part-Aboriginal parents themselves wish to limit interaction with white society then they need information on the probable educational consequences for their children before they make such a final decision. Since limited educational progress is contributing to the position of dependency from which adults are trying to escape, somehow a way must be found to solve children's and adults' needs concurrently. The contributions which a qualified non-Aboriginal teacher can offer in no way set limits on what Aboriginal parents themselves may wish to teach their children. For a bi-cultural society, children would seem to need bi-cultural learning situations.

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Time is important - time to establish the positive personal communication which would allow some discussion of the matter of children's progress and what more adults might do to help. There is no certainty that a group play situation and the presence of parents will provide the educational ingredients needed. This is rather like multiplying the family situation in which any problems may originate. Are these of the kind that are likely to be changed by parent participation in a group with children?

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Some very informal arrangements, a temporary setting for establishing contact, and a chance to answer some of these questions are the immediate needs. Will it be possible to leave decisions about "who controls what?" and to avoid creating roles which appeal on grounds of social status rather than actual teaching responsibilities, until an educational framework for discussion is established. The general way of organizing work will need to be one that allows for the situation of very different families. This will not happen if we talk in the context of what activities for children a few of the most interested parents would like to "run."

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Is this communication goal realistic? Not until parents have some concrete experience of seeing how an adult works with young children in a teaching situation. Questions about what she is trying to do, with the help of different materials, may then arise and a concept of "pre-school education" begins to have some reality. A shared enjoyment of what children have achieved and the withholding of any early attempts to influence parent-child interaction may help in moving out of a power-oriented framework for Aboriginal/white contacts. This is worth striving for.

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What other advance concerns? Most decisions can only be made as the situation develops, but when so much is unknown, it helps to clarify expectations. One further area for reflection - the need to be sensitive to Aboriginal families across a much broader range of characteristics than those highlighted in the remedial framework of current action research. What, for instance, might we learn from them - new viewpoints, different skills, another emphasis in values?

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8.3 The practical situation: Swan Hill, 1969

What was the situation in 1969, when the project started?

At Monash University we had one half-time Project Co-ordinator and one two-fifths time Psychologist; no suitable teacher was available for work in Swan Hill. Two hundred or more miles away from the University there was one room where Aborigines gathered for meetings, craft work, a cup of tea with friends after shopping or a rest while waiting for a ride back home for those living out of town. Wandarrah, the building provided by the Ministry of Aboriginal Affairs for a meeting place for Aborigines in the area, was the practical setting for establishing contact. No special facilities for children existed there. Apart from the meeting room, the building consisted of offices where staff employed by the Ministry were available to help with health, social welfare and adult education problems. An Education Officer, a Health Sister, a Secretary (all non-Aboriginal) and an Aboriginal Liaison Officer worked there full-time, and a Social Worker from Ministry headquarters in Melbourne on alternate weeks.) A small, high-fenced back yard and adult toilets, and an office-sized storage room completed the scene at the back of the building. In front - a porch on to the street, and in the centre of the road - a main road in the middle of town - a wide nature strip served as another gathering spot for Aborigines.

"Wandarrah"
Swan Hill

Children tended to follow adults about as they came in and out of the Centre, and moved from one place to another around town. Their newly-acquired homes have not yet replaced more familiar places for socializing or sharing problems.

How might one start on the task of getting into communication? Weekly visits by the Project Co-ordinator, with psychological testing of children as soon as feasible, seemed the immediate practical possibilities. But first, some unbroken time for becoming a part of the scene, at least in the physical sense would be needed; for some tentative planning with Wandarrah staff on practical problems, and on the local meaning of cultural and educational questions - and most of all, an opportunity to listen, to be a participant observer, and to start to break the perceptual screen created by life in a very different context.

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Initial contacts . . . from teaching notes

Two weeks with a motel room as home base. Days at Wandarrah, melting into the local scene as far as possible, while Aboriginal adults come in and out - some of them cheerful, some exhausted; some expressionless, others hostile over some immediate problem; some attractive, well-dressed, others reflecting poverty and depression. Children of all ages from tiny babies to teenagers - all of them part-Aboriginal, but physically contrasting - dark-skinned, unmistakably Aboriginal in facial characteristics, to blue-eyed children so fair in colouring that their Aboriginality is only evident in their parents' identification with the Aboriginal community. The young children seem to have little to do; they spend much of their day waiting, while adults attend to their problems and needs. In between waiting, they are en route somewhere else. Some appear exhausted; others take it in their stride.

A smile and a brief explanation about the reason for one's presence, and an expression of regret at not knowing people's names, serve to avoid any misconceptions - that one may be a Welfare Officer, come to take away someone's uncared-for (from a non-Aboriginal viewpoint) children - or some other representative of white man's power - or just as unwelcome, someone with a combination of curiosity and charity towards a "downtrodden minority." A working spot at the end of the room from which to come and go - varying physical proximity according to the awareness and responses of parents and children. This is a two-dimensional job! - horizontal movement to accept a cup of tea and to talk for a little with mother or grandparent; vertical to sit on the floor with semi-mobile babies, enjoy them with their parents, or observe their response to a stranger. Some working materials - a plan of the building, a map of the area, a rule for measuring possible play space - visual cues to help establish a role, and something concrete to talk over with those who make direct contact, reducing the intensity of the social issues in interaction by the presence of objects representing a common interest. Following an initial explanation, interaction is not pressed. There is freedom for others to respond or not. Some do, others remain expressionless. On some mornings, one accepts many cups of tea interspersed with handshakes and short conversations - on others, little happens. It is a little like living on the edge of a world which looks reasonably familiar, but you know it is not. In spite of leaving opportunities sometimes there are no approaches made from within it. But the silence is not uncomfortable. For these Aborigines, time is not an issue. The thought of a three-year grant presses, but one of its special contributions is to pay for time to establish contact. This time is needed.

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A meeting at night with the Aboriginal Assembly. It is a privilege to be invited. This is an effort from within the Aboriginal community to think out and deal with their own affairs; it is not an easy process for those who come. The agenda includes plans for starting a pre-school program; five or six of the younger mothers are there amongst a group of about twelve Aboriginal men and women. The only other non-Aborigine present is the Education Officer in charge of Wandarrah, but he is there in a consultant role, not in the chair. There is an opportunity for making a start at explaining a pre-school program in an educational framework - as a way in which parents and teachers try to see that young children have all the help they need with various things they are learning at that age. It is fairly certain that, even with examples, verbal statements will mean little. Some concrete experience of what is involved is needed before there is much to discuss. But since the Assembly exists, the decision is theirs. Would they like to make some plans of this kind at Wandarrah? It would mean making a few minor changes to the building to make it safer and more suitable for children while we try to find out the most helpful ways of working.

The older members of Assembly approve... Then someone asks the younger mothers since they are the ones most directly concerned. Smiles, interested faces, and silence. Some murmurs of assent. It is agreed to start the next week. After the meeting one more vocal member explains that the younger mothers had told her that they wanted to say 'yes' but "were too shy to speak out." Reassuring - but a reminder that in the presence of older Aborigines, as well as non-Aborigines, younger parents might not express their own opinions freely; also that representing other people in meeting situations is not an Aboriginal mode of communication, but one used by the white community. There was no way of knowing how much these factors were operating or in what ways one's own presence affected what was said. But the atmosphere of the meeting was friendly, relaxed.

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One week later, driving north from Melbourne in late afternoon. On board, a few essentials for the first pre-school sessions on the following day - a large rug, play material for babies, a little equipment to interest older children - some Kleenex and towels. Enough to make an adult meeting room look different and inviting for children, but not too different for adults. Two sessions planned for the following day. Would anyone come?

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On the first day, three children and one mother in the morning; 11 children, five mothers and a grandmother in the afternoon. The next week, two different children in the morning; two mothers, an aunt and six of the same children in the afternoon. Three of last week's group are sick.

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Over the next months, parents and children came into the setting created for informal communication, some intermittently, some regularly participating in family-style groups. Children of five down to very young babies were likely to be present. The adults bringing them changed from week to week in some families; in others mothers usually came and occasionally a father or grandfather either out of work or on irregular hours. A two-hour session was the plan, the Aboriginal Liaison Officer helping with transport of more distant families in the Ministry-owned bus. On occasions, no-one came. But usually, there were several children with two or three adults. On some afternoons there were even too many for such a mixed age group in a temporary setting.

Minor modifications were made to the room; a small piece of adjoining land was leased which, with the back yard cleared and a cyclone fence erected made a reasonable space for outdoor activities for a limited number. The addition of children's toilet and washing facilities, the purchase of a minimal amount of children's furniture, and a selection of play material made it possible to function in a temporary setting, within requirements set by Health Department regulations. The storage room was cleared to make a small office. Financial and practical support from the Ministry of Aboriginal Affairs made the building modifications and purchase of furniture possible. The room used as a playroom once a week was cleared of all signs of pre-school activity at the end of the day - a careful plan to make clear the limits of change introduced and the extent to which another non-Aboriginal adult was operating within a place which represented important rights to Aborigines. After some months of weekly visits, communication was sufficient to allow the introduction of the Project Psychologist and the organization of initial testing sessions.

Impressions and reactions from experience in this Swan Hill setting and from work initiated in Melbourne the following year precede a report of various initial measures of children's progress and related environmental factors. In this way, some of the realities of the situation, for individual parents and project staff, may emerge more vividly; a more varied range of information from the project can be shared, and some links established between psychological theory and teaching practice.

Swan Hill
program

Courtesy: Ministry of Aboriginal Affairs

8.4 Conceptualizing early interaction in terms of behavioural learning theory.

The concept of teaching on which this project attempted to operate included the application of established research findings on factors influencing behaviour and learning to practical teaching responsibilities. Since the cross-cultural social learning situation of necessity took priority in our first year of work, and behaviour in that situation played a major part in communication, the theoretical framework of Skinnerian learning theory (Skinner, 1953) proved a helpful context for thinking about work. Experimental research has demonstrated, across a range of situations outside the laboratory, how principles of reinforcement from operant conditioning theory may be in action in teaching situations in ways which work against the teachers' intentions (e.g. Harris, Wolf & Baer, 1964 ; Scott, Burton & Yarrow, 1967). Much controversy surrounds the question of whether operant conditioning principles are relevant to education. Argument here appears to arise, however, from attempts to apply to education the techniques through which reinforcement principles have been demonstrated in experimental research. This by-passes the main question of what relevance the psychological principle of reinforcement so established (as distinct from the activities through which this finding has been demonstrated) has for teaching situations. The responsibility for education would seem that of applying such a principle appropriately, rather than of maintaining the technical procedures and scientific safeguards necessary for the quite different immediate purposes of research.

In order to illustrate links between one set of psychological principles and practical operations, the following discussion intentionally highlights specific elements of early interactions at Swan Hill. These represent a small part only of the total situation, however, and this should be kept in mind in reading this section of the report.

Inclusion of this selective presentation of certain elements of early interactions has these purposes: 1) to indicate that recognition of the psychological issues in practical events is a necessary pre-requisite to using relevant research findings in pre-school education; 2) to illustrate the practical help which results from establishing conceptual links between research and teaching; 3) to contribute something to general understanding of certain features of Aboriginal/white interactions; and 4) to suggest how the teaching field might appropriately influence scientific inquiry.

In what ways, then, could one better understand and control one's own behaviour during somewhat crucial early interactions if sensitized to how the immediate consequences of events were strengthening or weakening the chances of their future occurrence, through the operation of reinforcements of various kinds, determined by personal reinforcement histories ?

Example 1 : reciprocal reinforcements in early social contacts

As a representative of the white population, in general still a symbol of control and an uncertain object for trust to many Aborigines, one did not expect immediate acceptance. The visible form of this state of affairs made an impact, however, for which one was not entirely prepared. In some early interactions (and still in some new contacts) it was not unusual for one's normal expressions of interest, friendliness, or concern to be met by a complete absence of any reciprocal overt response. Possibly nothing was said; sometimes faces as well remained expressionless; a degree of tension could be felt; the social situation was ambiguous. If there had been physical withdrawal, one might more comfortably have interpreted the lack of response as shyness (which appeared to operate in other cases). But in the framework of non-Aboriginal social relations, the lack of recognition that an obvious approach had been made would usually be interpreted as disinterest, direct ignoring or rejection. It was, therefore, difficult not to react automatically with a consequent withdrawal of spontaneous expression of warmth, and of non-intrusive but friendly approaches, and to maintain nonetheless a positive expectation of a response at some time or another. In teaching children, one was used to this kind of demand on one's understanding, persistence and confidence. With one's peers, however, different meanings operate. A conscious effort was found to be necessary in order to avoid one's conditioned responses influencing behaviour in directions which would have communicated to Aboriginal adults something quite contrary to what one wanted to say, non-verbally, and to what one understood might be helpful to them. The theoretical framework sensitized one to the probable consequences of one's own automatic responses, and helped in interpreting the situation more objectively. Without this, perceiving the responses of Aborigines in the social reality of a non-Aboriginal world might have resulted in these responses successfully extinguishing the non-verbal element of a positive approach, and the associated opportunity to move into more direct forms of positive communication. We might have communicated inadvertently (at the level of associative learning) precisely what we wished to avoid teaching - that is, that the white population said one thing but did another. It has been demonstrated in various areas of psychological research that this double-bind situation can exist in spite of intentions. Therefore, the awareness of reinforcement contingencies and increased control of one's own responses made possible by analysis in terms of operant conditioning theory would appear to offer significant help in making progress with some mutually accepted goals.

In restraining natural tendencies to over-ready interpretation of behaviour based on previous experience within our own culture, it proved helpful at this stage to learn from those more familiar with the situation that these responses could represent a protective device; a need for time until re-assured of the motives and attitudes of unknown non-Aborigines; a generally less verbal communication system; or just a well-established habit in the presence of white adults. It was useful to remind oneself, too, that the meaning for us of acceptance or rejection on cultural grounds was amplified by project responsibilities; these gave positive responses from Aboriginal adults a reinforcing saliency not attached to their counterparts in society at large.

Example 2 : clear labelling of reinforcement contingences

Another matter requiring thought for existing reinforcement histories was the meaning which our reactions to attendance or non-attendance at pre-school sessions conveyed to parents, and why they participated. For part-Aborigines, who very often have not experienced positive responsiveness from the general community, there would be no reason why its social approval of their behaviour should hold reinforcement value. They have had little prestige to lose by lack of conformity and some satisfaction from retaining a degree of autonomy. On the other hand, one observed that the negative attention of white society had acquired reinforcing properties for some. These increased the probability of certain behaviours, almost traditional in Aboriginal/white relationships.

For some part-Aborigines, behaving in ways which brought disapproving attention, even to the point of police action, appeared not to be a conscious, deliberate activity. Rather it seemed an unconscious - often desperate - response to hopelessness and despair, both cultural and personal. For others, however, a conscious manipulation of the contingencies of attention from the white community was a way of maintaining some personal autonomy in the face of white authority. Efforts might vary all the way from the mild (but not hostile) familiar amusement of "taking the white man for a ride," or the materially rewarding "playing the system" of social benefits, to vigorous resistance to anything originating from sources which represented white authority. This has been expressed on occasion in a range of less acceptable social behaviours - destroying public property, violent epithets, refusal to participate in activities at Wandarrah, failure to pay rents - all guaranteed to bring fairly certain and immediate negative attention from official machinery and the white community. Seldom has the white community revealed any awareness of the reasons why such sources of satisfaction were sought, or of their own direct responsibility for maintaining conditions which both evoked and reinforced such behaviours.

In view of reinforcement histories such as those just described, it appeared most important to ensure that mere attendance at pre-school sessions did not, in itself, become an issue. Staying away could become one more way of registering a protest against general conditions of discrimination and prejudice. It was necessary, therefore, that any absences were not to be met by expressions of undue concern on our part, or social pressure to participate. Such attention to negative behaviour would only reinforce responses incompatible with pre-school education.

Was consistent praise and approval for attendance on pre-school days the best method of establishing regular habits of participation? Behaviour modification theory might suggest such a course. If, however, over time, these responses acquired positive reinforcement properties for the Aboriginal adults in question, two things would be very wrong. Aborigines would be even more subject to control by a majority group, having learned to need this approval; and there would be no way of observing the development of voluntary interest in and concern with their children's education.

The real work seemed to need a focus not on their behavioural responses but on the origins of reinforcement. It was necessary to establish some new contingencies, at the same time ensuring that unhelpful ones were withdrawn, and that the reasons why these were satisfying were dealt with in some other way. The consequences of parental participation in pre-school activities should be some immediate, satisfying and obvious connections with children's progress - awareness of some new skill acquired; a child a little easier to manage; awareness of an increasing vocabulary or of sources of fun in something done together. Very careful labelling was attached to absences. If mentioned, they were strictly related to something children had missed, that could have been helpful to them; or to the fact that the mother herself as a person had been missed by the teacher and others. Quite apart from any problems arising from past experiences, it was essential that the involvement of families in a pre-school education program was not a conforming response to the values of other adults, but a voluntary expression of concern with children's progress.

It took a little mental re-organization to really feel that there was no special problem if, at the end of a five hour drive and an overnight motel stop no-one, or only one or two, came to the group. Sometimes, however, some extreme form of communication is necessary in order to break through others' established attitudes and expectations about what one may think matters. As a means of conveying a strong pattern of primary concern for Aboriginal families and children's education, this weekly pattern helped. At first its meaning did not register. Then there were signs of awareness that, since no demands were made in return, it was people that mattered. There were a few directly appreciative comments about weekly visits. A little later, a case of oranges for one's sick mother from the Aboriginal Assembly seemed to put a final seal on an unspoken agreement, in a way distinctly expressive of some Aboriginal values. Some of the "shoulds" in the situation had apparently been removed, and intrinsic sources of reinforcement appeared to be operating.

It proved possible, then, to transform a social situation in which non-educationally-oriented reinforcements operated into one in which educational communication was possible, without withdrawal of warmth or of support for Aborigines' efforts towards independence. The main point was to establish very clearly that, in our view, such positive feelings and support were not (as had been learned) contingent on any behaviours. Respect, recognition, and interest in individuals, understanding or concern, were to us responses warranted on the simple basis of human equality; in this situation, they did not have to be fought for, nor were they the prerogative of those who co-operated. Non-intrusive, consistent but carefully non-contingent reinforcement for adults (varying with opportunity and need) therefore accompanied efforts to avoid creating in our program sources of satisfaction not helpful to educational goals; to establish opportunities for intrinsic reinforcement; and to provide a new basis for communication across socio-cultural borders. With one teacher, weekly visits only, and an unpredictable pre-school population, formal documentation of any change occurring was not within the realm of possibility. Also, the support offered in similar directions by other staff at Wandarrah, in between and during sessions, must have contributed to any positive results.

In this project, however, the point was not to test hypotheses or replicate findings which have been subject to widespread scientific study. The issue for this educational effort was to use theoretical knowledge of well-established explanatory principles in order to understand the variables in a specific situation, and to control these more effectively, towards some educational outcome. If results were not in line with theoretical probabilities, the results of carefully controlled research would not be disproved. Findings might have been generalized inaccurately in this instance, or the results confounded by a multiplicity of other associated variables, over which no control was possible in this teaching setting. But results out of line with predictions based on well-known theories can raise questions for further study; and attempts to apply research to teaching may in turn sensitize research to possible new emphases. Where outcomes were in line with predictions, there would be further informal empirical support for a psychological theory, and its relevance to some new situation would have been illustrated. Such a working relationship between research and teaching seems a successful way of avoiding the conflicts inherent in action research. The focus in a teaching program is on seeing the relevance of a body of research data about factors affecting learning, and of using rather than extending this.

8.5 The outcome of initial contacts

Results of these initial efforts at Swan Hill to establish bases for interaction on the grounds described will show in the nature of data presented in other sections of the report. A few general comments here may be pertinent.

The early interest in co-operating with a teacher over educational activities for pre-school children has been sustained and developed in this part-Aboriginal population. Later in the first year, the project psychologist's visits for testing purposes were accepted without strain, and spontaneous interest in children's progress was shown by some parents. Attendance at teaching sessions was affected by a range of factors but these did not include power struggles with project staff, although there is still evidence of these in action in other situations involving non-Aborigines in official roles. Comments from parents still indicate expectations of discrimination in other settings, and communication on matters important to them is limited to those with whom personal experience has built up a feeling of trust.

In 1970, a full-time teacher was appointed to the program. Preparation for this change was necessary and a time of overlap with original staff arranged; but the teacher herself was subject to a variety of "tests" and it was necessary to maintain the existing contingencies and unconditional social acceptance. There was, however, no major crisis; attitudes to the program have been increasingly positive and there are more families seeking participation than one full-time teacher can assist.

There is no doubt that some direct benefits to parents help to sustain positive attitudes to the program (for example, time on occasions with a few less children). They do not only represent concern with children's education. But other reinforcements operating are consonant with, and not in conflict with, educational purposes and are recognized openly by teacher and parents, as part of the general effort. They are common to regular pre-school programs.

8.6 Reflections on operant conditioning theory and education

The experience reported leaves one with several reflections on the contribution of Skinnerian learning theory to education. The degree to which the outcome of early interactions at Swan Hill was the result of attempts to deal with reinforcement contingencies cannot be known. It was, however, in line with predictions and contrasted with other situations in which different reinforcement contingencies operated. The conceptual framework of operant conditioning theory was certainly helpful in analyzing elements of a complex social situation.

Recording the following reflections may be useful.

1) In contrast to the emphasis originating in behaviour modification theory, the significance of operant conditioning principles for education may not lie in the application of effective schedules of reinforcement. It may be, instead that, through awareness of existing reinforcements operating, one is able :

    a. to avoid being manipulated by these
    b. to ensure that informal and formal communication are consistent
    c. to create opportunities for learning which would otherwise be precluded, by the extinction of responses incompatible with learning

d. to build up reinforcement histories which lead towards a degree of freedom from the operant conditioning of the natural environment

2) In interaction involving racial issues and minority groups, the concept of behaviour modification seems particularly inappropriate, since it implies that the problem is on the other foot! - that the behaviour of the social minority is in need of modification. The principle of operant conditioning, however, as it relates to incidental learning allows one to understand better what may be wrong with one's own behaviour, and how unintended discrepancies between behaviour and verbal statements may be a source of lack of trust.

3) In generalizing from experimental studies of behaviour modification, it seems that the focus has been on the activities in which operant conditioning principles have been demonstrated, rather than on understanding the relevance of the principle itself. This may partly be the result of failure to differentiate the immediate purposes of experimental research and teaching; consequently, forms of reinforcement which can be measured easily and varied widely in frequency within the period of an experiment, have been generalized to education. In keeping with this, mediating variables studied have dealt with quantitative (e.g. satiation and deprivation) relationships rather than qualitative ones between a state of receptivity in the person learning and a reinforcing consequence from the environment. The existence of the former state appears at times to be ignored in discussion.

Field work in a project such as this serves as a strong reminder that the "rat" must be reasonably hungry, that something has made him so, and that given opportunity, that "rat" may prefer a different or far more varied diet. The difference between concern with the nature of reinforcements in the environment as they influence others' reinforcement histories, and concern with using established reinforcement histories to control others' responses seems synonymous with the difference between an educational program and custodial care - there is some overlap in the elements of each, but they are used in the second case to help manage another, in the first case to help another manage himself. Extinction procedures in behaviour modification are, therefore, much less likely to conflict with educational goals than the administration of schedules of social or material reinforcement. In teaching, one may need to be far more concerned with modifying the nature of reinforcements operating in the learning environment than with modifying the nature of the responses learned as a result of existing ones. The principle is still relevant; but the starting point, and therefore what should be modified, differs. Experience in this project suggests that such a reversal is essential in work with Aboriginal families; that incidental learning is crucial in cultural interactions; and that on no account should expressions of personal interest and warmth towards a people be contingent (unconsciously) on their behaviour, if positive communication is to be established.

8.7 Introduction of Metropolitan program : 1970

Contacts with Metropolitan families were made on an individual basis, since no group activity drawing them together existed. In initial contacts, we tried to communicate the concern of pre-school teachers with all families with young children, but also our concern to give some priority to Aboriginal families at this point, since they seemed to miss opportunities to be part of community planning.

Early discussion with Ministry of Aboriginal Affairs staff had been helpful in giving some indication of the general situation of families for whom addresses had been supplied. Contacts were made independently, however, and we had little idea in advance of likely responses to an opportunity to think about children's education.

In order to keep first approaches informal, and not officially overpowering, the Project Co-ordinator made an initial enquiry about the family's interest in talking over possibilities. Parents (usually the mother) were then invited to come out to the car and meet the pre-school teacher who would be working in the area; she then had a little time with any parents interested to make a personal contact and arrange a time to come back. This avoided a two-to-one situation, any expectation of an immediate invitation into homes, and - hopefully - a situation in which parents felt obliged to commit themselves with a nominal "yes which would be retracted later. We tried to keep the emphasis on giving information about an opportunity to talk and learn about pre-school education and on arousing interest in hearing more about possibilities, knowing that previous contact with something called "pre-school education" was unlikely. Most of all, however, initial calls were planned as friendly personal contacts, which allowed parents freedom to respond to the social situation to the extent they felt ready for, or wished.

We also tried to make it clear that, if the teacher were invited to return, it would be possible to work outside - on the porch, in the yard, or in the project car, for example, with one or two children for short periods. In this way it was possible to prevent the absence of the usual physical facilities for teaching creating any feelings that the privacy of families might be at risk; room was left for parents to take some initiative.

In March, 1970, we tried to contact the 16 known Aboriginal families with young children, in the program area, in such a manner. Two had left the district. In 11 cases, the response to initial contacts was positive; mothers accepted the invitation to talk about possibilities, asking the Project Co-ordinator into their homes and coming out, with varying degrees of confidence, to meet the project teacher. In a further instance, both parents were working during the day and contact was made indirectly. Through these visits, the pre-school teacher came into regular contact with 22 Aboriginal children between 1 and 5 years of age, and 4 non-Aboriginal neighbours, and began to develop co-operative working contact and communication with each family. A further four Aboriginal children participated for short periods while parents were in the area.

In the two remaining families on our initial list, immediate reactions were doubtful; conversations were carried on through closed wire doors. In one case, there was obvious interest in and concern with children's welfare, but shy withdrawal from contact. On a second visit, more communication was possible, but the family was found to be moving away.

In only one instance was there any overt expression of negative attitudes; here again a later visit found the family to have moved because of a housing problem, which may well have been the reason for earlier lack of communication.

A home visit teaching program was developed from this beginning. All parents freely offered the use of their front rooms for one or two teaching sessions weekly. As families came to know and trust the visiting pre-school teacher, they asked if she could visit other families too. Some of these were non-Aboriginal neighbours or friends. While practical possibilities set limits to the numbers that could be included in the program at one time, it has been a project policy to respond to the suggestions of Aboriginal parents, where at all possible, for extending project enrolments - particularly where these entailed interaction with non-Aboriginal families. In this way, Aboriginal parents were in a position to offer something to others in the community, and to control the balance of Aboriginal/white interaction in the program, rather than being expected to come into an existing group of predominantly non-Aboriginal families who were already familiar with pre-school education.

Some characteristics of teaching activities and of the families participating in this program, and something of the experience of the teacher herself, are described in further sections of the report. The overriding emphases which we tried to communicate in early contacts and ongoing work were:

1) educational concern for all young children, regardless of their ethnic origin

2) recognition of the particular position of Aboriginal families in the general Australian community at present, and interest in supporting their efforts to cope with a social and physical environment which held sources of practical and psychological stress, and to build a more secure family setting for the future

3) respect for parents' existing beliefs, values, and preferences for ways of dealing with young children

4) an absolute acceptance of parents right to control what happened in their own homes, and concern to arrange teaching sessions so that both parents' and children's immediate needs were considered.

Just what these emphases meant in any practical sense is difficult to communicate in a written account. Illustrative comments appear in later chapters.

SECTION IV: INITIAL DATA ON CHILDREN - GROUP REPORT

Chapter 9 SELECTION AND REVIEW OF TESTS

There is legitimate concern among qualified pre-school teachers at present regarding the widespread assumption in action research programs that group results on psychometric measures of intelligence provide an appropriate basis for planning pre-school education programs, rather than some of the information relevant to this. Some such concerns have been mentioned in other sections - for example, on the different purposes and responsibilities of research and teaching, and on criteria for evaluating pre-school programs. Others, such as the task of defining "intelligence" (rather than having it defined by available tests) are general problems in the fields of psychology and education, much more far-reaching than can be tackled in this project. They do, however, throw into question the meaning of much of the current literature on compensatory education.

This situation appears to have arisen because, in neither education nor psychology, has there been a planned and comprehensive approach to solving certain major problems which limit the practical contributions of these fields, and depend for their solution on cross-disciplinary communication. Now, in the urgency of dealing with social problems, action research has been funded as though these limitations were merely matters of application. This is by no means the case. There is a history of lack of purposeful two-way communication between the fields of psychology and education which has some negative consequences for dealing with teaching responsibilities and measures of learning in children. These consequences are not dealt with at all by the recently increased involvement of psychologists in compensatory education, and of teachers in action research.

It has, therefore, been necessary to give considerable thought to the place of a testing program in an educational project at present. Attention is drawn to the following statement of the purposes which the testing program was seen to serve. Further, communication of the thinking behind test selection, in some detail, and a critical review by the project psychologist of certain features of the tests selected for use, were considered necessary prerequisites to readers' interpretation and possible use of the initial test results presented in the next chapter.

9.1 Purpose of testing program

The aims of the testing program in this project were two-fold:

1) to obtain some broad descriptive data on standardized scales of mental development. (Such information is relevant to general statements made about the progress of Aboriginal children, and to interpretations of data from various tests in current use with pre-school children.)

2) to provide detailed information on each child's progress (from study of performance in the test situation) as a basis, together with other behavioural data, for planning individual educational programs.

The psychological examination was not directed at categorizing children into ability groupings nor was it planned as a pre-treatment assessment to be used as a baseline for evaluating the effectiveness of the pre-school program. The former aim is quite antithetical to basic educational ideals held by members of the project staff; the latter is a highly equivocal research method in such a setting, where changes in an individual's status on test norms may result from a range of factors unrelated to the education program, and known to be significant influences on learning and also impossible to control in the families concerned.

Further, the psychological assessment of pre-school age children is a hazardous proceeding, and that of children deemed to be in need of special educational intervention programs even more so. To our knowledge, no research study of the experimental effects of pre-school education programs has taken up the problem of validity of the initial assessment of children. Research evidence which predates such programs has indicated that such assessment may significantly underestimate their existing ability. For example, none of the tests used at this age, with the exception of the Merrill Palmer scale, allow for an adjusted score related to test refusals.

With the additional problem of interpreting the educational relevance of test results and problems of reliability of scores over time, it seems at this point that the main contribution of psychological tests to pre-school education is the information yielded, at one point in time, on the relative progress of aspects of learning considered of educational relevance.

The descriptive data presented in this section of the report are included from the viewpoint of their relevance to some of the statements and assumptions being made about Aboriginal children as a group, and the effects of certain kinds of learning environments. Group analyses of initial test results provide a means of checking one's expectations of Aboriginal children.

9.2 Selection of tests : notes on some contributions and limitations

1) Binet Scale (1960 revision)

For an initial examination it was decided to direct efforts to obtaining a complete performance for each child on one basic instrument at least. For pre-school ages the most widely used scale in both research and clinical work is still the Binet Scale, either the earlier 1937 revision or the more recent 1960 revision which was used here.

The pre-school extension of the WISC, the WPPSI, covers only a limited age range (4-5½ years) and, though it consists of a set of sub-tests and provides measures of Verbal and Performance IQ, this differentiation of scores has not, to our knowledge, been successfully validated factorially.

It also lacks the well-established educationally predictive value of the Binet Scale which, it was anticipated, would prove useful in follow-up studies. The selection of the Binet was based on the following further considerations :

(a) It is highly acceptable to pre-school age children. This important aspect of any scale designed for use with this age group would seem to have been given less attention by other test constructors. It is seen to have ensured the long standing viability of this scale. (The Merrill Palmer Scale also has this characteristic, perhaps to an even greater extent, but lacks other advantages of the Binet Scale). In this respect the Binet Scale, in our own clinical experience, had contrasted with more recently developed scales such as the WPPSI and the ITPA, and earlier ones such as the Minnesota Pre-School Scale. Thus Palmer (1970, p.102) observes in a recently published Handbook on the psychological assessment of children : "The Binet Scale has the distinct advantage that... its items are addressed to children, attract their interest and hold their attention." Such a feature goes a long way in ensuring at least the validity of the child's performance on the test, not, of course, what the test is presuming to measure.

(b) It is a well validated measure of general ability in our society, being widely used to classify individuals on this dimension, and at the same time to establish the validity of alternative measures and methods of classification. From the viewpoint taken in this project, much of the criticism of the Binet Scale as a measure of intelligence is not seen as relevant to the pragmatic usefulness of the instrument. Measured intelligence has been seen in this project as essentially a bio-social trait and the possibility of culture free or fair tests rejected. While the general factor of the Binet Scale may be more accurately described as a "Verbal-educational factor" (Vernon 1961) and the test "largely a measure of scholastic aptitude... heavily loaded with verbal functions" (Anastasi 1968) this is also seen to typify intelligence tests designed for use in our culture. (Anastasi, op.cit.)

Certainly as a measure of scholastic aptitude it has been well validated over the years. Indeed it was this particular aspect of intelligence that focally concerned the originator of the scale - that which "constitutes the intelligence of a pupil, the capacity to grasp and assimilate instruction" (Binet, 1909). Binet himself had never conceptualized intelligence as other than an essentially modifiable characteristic which yielded to "skilful farming". At the same time, Binet's own approach was essentially pragmatic - his test worked and in successive revisions has continued to work. It is, however, a technological rather than a scientific instrument - a tool that has been found useful in making classifications and predictions about children's intellectual functioning on the basis of the sample of items constituting the scale, and the population sample on which it was standardized. The measurement, in common with that of other psychological tests, is both indirect and relative. However, in themselves these do not constitute instrinsic weaknesses of the test as a measure of scholastic aptitude for populations similar to the population on which it was normed.

(c) *It was considered as appropriate a test for the part-Aboriginal participants of the pre-school program as any other available scale* in terms of the standardized sample providing the norms for the scale. Australian norms are not available for this, or any other test scale at pre-school levels. Certainly the Binet Scale has been somewhat more adequately standardized at this level for the American population than most other scales. At the same time its over-all norms have been criticized on the basis that, specifically, both negroes and itinerant workers were excluded from the general standardization sample; indeed this has been the case in the construction of all such widely used scales in the U.S. Thus it is argued that with these significant sections of the national population excluded from the norming population, which at the same time included an excess proportion of urban subjects, national norms represent over-estimates of average performance. Local norms have been proposed as a "helpful supplement" (Anastasi, 1968).

On the other hand some English studies have suggested that the Binet Scale may be under-normed for the general school population of the United Kingdom. This may well be so as it seems likely that the greater cultural homogeneity of this populace, despite the recent influx of "colored" immigrants, could well be reflected in a higher mean score and the same situation could hold in Australia. What has come to be termed "measured intelligence" can lay little claim to being a fixed, invariant characteristic either in relation to individuals or populations, though the underlying genetic basis of the behaviour sampled may be both.

An examination of the age placement (particularly of verbal items) in the original Binet Scale, compared with the recent revisions, reveals a consistent downward shift to younger age levels. It seems unlikely that the intervening years have seen dramatic improvements in the gene pool of Western societies, but revisions of the test indicate that today's children are expected to exhibit such "intelligent" behaviour at earlier ages than their counter-parts in the first decade of the century. At the same time the children of the current in-migrants to the urban complexes of contemporary technological societies may be no less "intelligent" than those at the turn of the century, but test at lower levels on today's norms. These complex issues of norming, however, involve all attempts to construct measures of psychological characteristics with any general applicability - not just the Binet Scale. In the case of this scale, however, the data that has accumulated over time and across groups makes it possible to raise them.

With respect to the norming of tests for pre-school age children, additional problems are created by the general inaccessibility of subjects prior to the age of compulsory school attendance. Thus the authors of the ITPA test found that the socio-economic composition of their pre-school standardization sample showed serious discrepancies when compared with that of the population at large - short comings that were much less marked in their school age sample. Pre-school samples drawn for test norming are, in general, likely to under-represent lower socio-economic status families and the test norms produced constitute over-estimates.

The extent to which this has affected the Binet norms at these levels is not known - the only test to our knowledge which has provided critical information on these SES differences between the norming population at pre-school and school age is the ITPA. However, it is of interest to note that Binet himself commented on the large number of children at 3-4 years classified as backward on the Binet and Simon 1908 version of the scale - this he attributed partly to the "timidity", but largely to the "ill-will" frequently exhibited by this age-group, which resulted in a large number of refusals to answer the questions.

On the contemporary scene this negativism is seen to characterize children from sub-cultural groups rather than the population on which tests are normed!

More basic than the problem of obtaining a representative sample of pre-school children for norming tests is that of constructing a set of test items which adequately samples the verbal abilities of children at this age. In this respect the Binet Scale has a somewhat wider range of applicability at pre-school levels than the strong verbal bias of the test items at later ages might indicate. While virtually all the items at the early levels involve a comprehension of, and a readiness to respond to, verbal directions, only a small proportion of these require a familiarity with the repertoire of the adult speech community for their successful performance. On such items, however, pre-school children who are restricted to a verbal repertoire at home markedly discrepant from this are handicapped. This point is discussed further in later notes on the ITPA test.

Over all, the advantages of the scale which are seen to rest on the demonstrably sturdy pragmatic qualities of being an efficient technological instrument were seen to outweigh its shortcomings as a scientific measure of factorially defined cognitive abilities with norms appropriate for the population to be studied. In any case no such alternative measure was available. At the same time, it was planned to supplement the initial assessment of the children's current cognitive status provided by the Binet Scale with additional test measures where appropriate, and to utilize in addition observational data.

2) Leiter International Performance Scale (1948 Revision : C. H. Stoelting Co. Chicago. T.P.P.) This had been considered as a possible alternative to the Binet Scale for the initial assessment of the children. Designed initially as a cross-cultural test of general intelligence, it was modelled on the 1916 version of the Binet Scale, covering a range of intellectual functions of similar scope. The scale is characterized by the almost complete elimination of instructions either spoken or pantomimed. Despite the sharp contrast in test content administration, it has been regarded as constituting a "non-verbal" equivalent to the Binet Scale (Anastasi, 1968) unlike other performance scales. Items require the setting out of the solution in a response frame which holds small blocks that juxtapose the stimulus card slotted into an adjustable holder. While most of the early items involve largely perceptual matching and discrimination, later ones require an internal manipulation of the stimulus material, demanding more abstraction and thinking skills than would appear to be the case with items in the 4-7 years age range on the Binet Scale.

Not surprisingly it has been re-appraised recently as "among the best non-verbal tests of receptive cognition" (Palmer, 1970, p.207).

As far as is known the Leiter Scale has not been subjected to factor analytic studies, but on face value it would seem to be more highly saturated with Spearman's 'g' factor than the Binet Scale and, in Cattell's terms to be more a measure of "fluid" ability, less one of "crystallized" ability than this scale (Cattell, 1963, Horn & Cattell, 1966, Cattell & Butcher, 1968). A built-in feature of the Leiter is that successful performance requires learning to carry out these tasks. Thus, overall, the items of this scale would appear to qualify as potentially better measures of "fluid" ability - in that they are novel tasks, not drawing on "over-learnt abilities" (Ferguson, 1954) - than Cattell's own "Culture-Fair tests".

Reasons for using the Leiter Scale as a supplementary test rather than as a "Culture-Fair" alternative to the Binet

The decision to use the Leiter Scale as a supplementary source of information regarding the level of cognitive functioning of the children, rather than as an alternative and more appropriate choice than the Binet, was based on the following considerations.

(a) Current thought, as indicated previously, has largely rejected the notion that psychological measures of ability can be constructed that are in fact culture free (Biesheuvel, 1969) or that they would prove adequate tools even if this were feasible (Anastasi, 1968).

(b) The fact that a test is "non-verbal" in no way established its suitability as an instrument for cross-cultural or sub-cultural testing. Language is only one of the many parameters along which cultures may vary, and one more readily accessible to exclusion by skilful translation of verbal items (see Ortars comments on his experience in Israel quoted in Anastasi op.cit.)

(c) The results from earlier cross-cultural studies using the Leiter Scale had certainly established that it was not culture-free or fair. In the manual for the 1946 revision, the author himself would seem to regard the test not as an international measure of intelligence, as originally conceived, but as a non-verbal alternative to the Binet Scale within the American culture. Studies quoted indicate a satisfactory level of congruent validity on the basis of correlations with the Binet Scale and somewhat similar predictive validity in relation to educational performance.

(d) Studies of young deaf children would seem to indicate that the Leiter is a more satisfactory instrument than others for assessing cognitive development in these linguistically handicapped groups (Lenneberg, 1967). It has also been found to be "a powerful predictor of academic aptitudes in deaf children" (a study by Birch & Birch, 1956, quoted in the manual for the Leiter Scale). This would seem to establish its value as a necessary alternative to the Binet Scale for these handicapped children within the culture not, as Lenneberg suggests, its suitability as a measure of intellectual development among so-called culturally "handicapped" groups.

(e) Cross-cultural studies have indicated that it is not merely the item content that may be unfamiliar but the way of thinking demanded by the item. Even where the content may be equally familiar or unfamiliar to both groups, this difference may be maintained. Indeed "non-verbal" items may be more demanding here than verbal items where an alien "problem-oriented" or "abstracting" mode of thinking is required. Thus empirical data has indicated that differences or deficits on "non-verbal" tests may be greater than on verbal tests among groups who are handicapped at the same time by limited familiarity with the language (Vernon, 1965, 1969).

(f) More recently, sociolinguists have pointed out that minority groups may learn, or be educated in, the language of the "power" group of a speech community, but have only a limited opportunity to share other "socio-cultural patterns" of that group (Fishman, 1970). Neither the modal experiences, nor modes of thinking of the dominant group may be as accessible as the linguistic forms - under these circumstances the test findings of Vernon and others are hardly surprising.

(g) Much of the evidence of verbal-non-verbal differentials in test performance has come from studies of older age children - at the stage of entry to secondary school or later. There is a lack of confirmatory evidence that the same differentials may hold for primary and pre-school age children from these so-called "culturally deprived" groups. Particularly at the earlier ages it may well be the experiential basis for the development of certain concepts that is lacking, the absence of the appropriate linguistic forms only a surface manifestation - a situation to which the Genevan school has drawn attention (see Sinclair 1969).

(h) While the emphasis of this school of research has been on the importance of non-linguistic activities for early cognitive development,there is evidence from other studies, also, that play experiences including the toys available, may contribute to performance on ability tests and may also vary for different sub-cultural groups. Bernstein's studies of verbal-non-verbal differentials in working-class and middle-class youths, which he attributed to differences in the linguistic codes characteristic of these groups (Bernstein 1960, 1962) are well-known and frequently quoted references. Less well-known is a more recent study (Bernstein & Young, 1967) which found social class differences in parents' attitudes to toys. These attitudes correlated more significantly with Performance than with Verbal I.Q. on the WISC. In an earlier study, Bing (1963) demonstrated relationships between early maternal behaviours (as reported by mothers) and children's later performance on non-verbal as well as verbal tests. Hess & Shipman's (1965) studies showed concurrent relationships between mother's behaviours and children's performance on non-verbal tasks.

Summarizing these considerations it seemed unlikely that the Leiter Scale represented a more appropriate test for making initial assessments regarding the cognitive abilities of children in the program than the Binet Scale. We knew little of the children, but from what was known of the tests both were sets of cognitive tasks requiring crucial previous learning experiences, as well as certain levels of ability for successful performance.

At the same time the test situation itself, regardless of the type of task, was likely to be an unfamiliar experience to all the children and affect performance on both scales. However we were interested wherever practicable to use both scales - both appeared likely to provide useful though different sorts of information regarding the children's development. In particular, the inclusion of a completely non-verbal scale had important advantages as it seemed to us that, where the investigators only concern is with verbal or linguistic defects, these may well be the only ones uncovered.

Some disadvantages of the Leiter Scale as a psychological measure

(a) A practical, but not trivial, negative aspect of the scale that those unfamiliar with it may not appreciate is its lack of ready availability and high cost. It cannot be procured directly from local test distributors and is a good deal more expensive than individual test scales in regular use. This proved an unfortunate limiting factor in the extent to which it could be used for re-testing. Because of the cost, only the first set of material (for years 2-7 on the scale) had been ordered.

This did not provide a sufficient ceiling for a few of the older, more advanced children at initial testing, and limited the number of older children on whom re-testing was feasible. Consideration was given to using the locally produced (also expensive) Queensland test, the lower age limit of which overlaps this scale. It incorporates features of the Leiter Scale such as the non-verbal administration of items that are of a "figural reasoning" rather than a performance type, in a scale of more sophisticated construction. However the two test measures are not comparable and the additional information obtained would have been difficult to interpret.

(b) Another practical disadvantage is that it can be very time-consuming to administer. As with the Binet, a certain scatter across age levels occurs and, to obtain a ceiling age, not just one but two levels with no successes have to be administered. However, as the child must be given the opportunity to learn how to do the test, more lower age levels have to be administered than would be required to obtain a basal age even with a wide scatter. For the more advanced children this may necessitate a very long test session.

(c) The value of this commendable, if time consuming feature, of the design is unfortunately lost for the younger child - there are insufficient lower levels of the test on which the two and three year olds can learn. Indeed it is difficult to conceive how the test could be made appropriate below 2 years; responding even at 2 years represents a difficult task. This had repercussions for the initial testing of the younger children on the scale - they could not in fact "take the test" till they had been in the program for some time.

(d) The original design of the Scale was modelled on the 1916 Revision of the Binet Scale and the Scale has been revised in 1940 and again in 1948; its test construction remains fairly primitive by the sophisticated standards that have developed in the intervening years. In this respect it is nowhere like as thorough in its standardization and norming as the 1937 Revision of the Binet. It is, like the Binet, an age scale but unlike the 1960 Binet, has not been restructured to yield deviation scores with a mean of 100 and a standard deviation of 16 throughout the scale. On the Leiter Scale, I.Q.'s are calculated on the basis $\frac{M.A.}{C.A.} \times 100$.

Unfortunately the author discovered when the 1948 revision was being completed that the age placement of items was too low - by about six months. To counteract this bias he recommends adding five points to the I.Q. obtained on the scale, to bring this figure in line with that obtained on other scales. This appears a haphazard and rather unsatisfactory arrangement and may still not sufficiently correct the bias; some comparative figures reveal mean Leiter I.Q.'s a good deal lower than those on the Binet. A consequence of this arrangement means that I.Q.'s obtained at different ages may not be necessarily comparable and at the same time the Standard Deviation for the scale, necessary to interpret these, may vary considerably from one age to another. The author claims that the Standard Deviation on the scale is comparable to that of the 1937 Binet but the data tabled in the manual suggest it is very often larger. These constructional weaknesses of the scale reduce its value as a measure. This is particularly unfortunate in view of the superior quality of much of the item content which would appear to possess good construct validity of that evasive property 'g'.

(e) Related to these practical and methodological weaknesses of the scale is its limited use in routine individual testing. There are only limited data available on the scale because of this lack of widespread use in clinical, educational or research settings. Data obtained with the scale cannot be examined and interpreted, as is the case with the Binet Scale, in the light of this background information.

3) Bayley Scale of Mental Development (The Psychological Corporation: N.Y., 1969)

From the very inception of the project, it was apparent to the planning committee that a significant number of very young children would be involved. They had already, in a sense self-selected themselves, at least into the Swan Hill program, as indicated above. It seemed important therefore to plan for their needs as well as those of the older children - more often than not, their siblings. From this point of view some assessment of the developmental status, particularly of the children around 2 years of age, appeared likely to provide a certain amount of useful information. It was considered that the Binet Scale would prove to be an inappropriate instrument here, as basal ages often cannot be established with this age group on the scale. Thus it would be necessary to select from among the Infant Scales available.

While a good deal of concern has been expressed in the literature regarding the dubious predictive validity of these scales, this has not been shown to be related to any intrinsic weakness in the scales as measures of current developmental status (Bayley,1970). Such criticism has arisen from what is seen to be inappropriate uses of the information obtained - that is, to classify children as possessing a certain ability level and predict their subsequent status on the basis of test performances which represent neither direct nor absolute measures of such characteristics. The approach taken in the assessment of the older pre-school children - that of obtaining a reliable measure of a child's current status on a standardized ability scale - seemed equally appropriate for the younger children, as it is indeed the rationale that has been proposed for the use of Infant Scales themselves (Bayley, 1969 p.4.).

At the same time, the reliability figures quoted for some Infant Scales and the inter-correlations between re-tests during the second year compare favourably with those for the third and fourth year on pre-school scales (Bayley, 1970).

The choice of the recently revised Bayley Scale which had just become available was not a difficult one to make. This revision represented a far more thorough-going attempt to standardize such a scale on a representative sample of the population than previous Infant Scales. An earlier revision of this scale, standardized on a quite small and almost certainly biased sample of infants, had been shown to possess a rich variety of item content (Stott & Ball 1965) and this has been returned in the current version, with the additional advantages of a psychometrically much superior construction. Behaviours reflecting motor co-ordinations and skills have been reserved for a separate scale. The Mental Scale itself, as described by Bayley, has been designed "to assess sensory-perceptual acuities, discriminations, and the ability to respond to these, the early acquisition of 'object-constancy' and memory learning and problem solving ability; vocalizations and the beginnings of verbal communications, and early evidence of the ability to form generalizations and classifications" (Bayley, 1969, p.3). Materials for the items are attractive and practical (durable, washable plastic).

Much detailed care was reported to have been given to the placement of items on a scale of difficulty and to the instructions for their administration and scoring. However the opportunity to study the scale in more detail and in a wider context than that provided by a clinical setting prompts the following more critical observations.

(a) The representativeness of the standardization sample

Bayley herself strongly represented the necessity of ensuring that "the standardization sample upon which test norms are based be representative of the population for which the test is devised" (1969, p.7). This may be seen as a critical feature of a psychometric instrument rather than an instrument for investigating a developmental process. In the latter case, the behaviour sampled provides objective evidence of the presence or absence of a particular developmental pattern - for example, whether or not the child has acquired object constancy; shows evidence of symbolic function; can conserve quantity and so on. This information stands independently of any test norms. However, norms are needed in order to answer other sets of questions about the child.

Performance on items of a psychometric scale only acquires meaning in terms of the age placement of the items (based on the performance of the standardization sample) and, additionally, in the case of a scale constructed like the Bayley, in terms of the mean performance and variability of the normative sample for the particular age group to which the child belongs. Thus the representativeness of the standardization sample in relation to the population for which the test was devised becomes, of necessity, an intrinsic component of the calibration of the scale.

While the sample was large compared to that of other Infant Scales - a cross-sectional sample of over 1200 compared to a longitudinally tested sample of 61 infants for the original scale - on closer examination it turns out to be somewhat less representative in important ways than the claims made both by Bayley herself and in various reviews of the scale. Reference has already been made to the very real, possibly insurmountable, difficulties in obtaining an adequate standardization sample at levels below the years of compulsory schooling. However, minimizing the extent to which the sample failed to reflect accurately the proportions of children in the age range of the scale in the selected strata of the U.S. population (as described in the 1960 census figures) may well mislead subsequent users of the scale - particularly as Bayley claims that such discrepancies as occurred are unlikely to have more than a minimum effect on results. She found, in children up to 15 months (Bayley, 1965) no significant differences on the mental scale related to variables of geographical location, parents' education or ethnic group - the areas of sampling where discrepancies occurred. As in other standardization samples, rural groups are markedly under-represented and, though non-whites were included, non-white rurals are scarcely represented. Again, the lowest occupation and education groups are under-represented.

These discrepancies are less likely to affect results for children in the younger half of the age range of the scale (up to 15 months). With the emergence of what Piaget terms the "symbolic function" later in the second year, "mental" test items become increasingly vulnerable to cultural specificity and one finds it difficult to accept Bayley's claims that the sampling discrepancies can only have a minimal effect on results for this older half of the age group. Consequently, expectations that test norms are adequate for the population for which the test was in fact devised - a national American population - may need to be revised. Where it is used with children from sub-groups under-represented in the population on which the test was normed - that is, rural dwellers, with heads of households of low occupational status, limited schooling and of non-white ethnic origins, scores obtained are likely to be subject to a certain "systematic error" (Shapiro, 1970) resulting from the scale's calibration on an insufficiently representative sample. A majority of the children with whom the scale was to be used belonged to such sub-groups of the Australian population.

(b) The selection and placement of items. Though, as indicated earlier, there is variety in the mental processes tapped by the scale, the placement of items and their actual content would appear less satisfactory. Characteristics both of the original standardization sample - small, test-sophisticated and almost certainly non-representative - and of the population on which the revision was normed would both seem to have contributed to this situation. The ultimate selection and placement of items on a psychometrically constructed scale of development is determined by their statistical requirements, not by a sequencing derived from a theory of mental development. Thus characteristics of the sampling utilized in the construction of the test may exert a significant influence on the content and placement of items. Where, for instance, peg-boards and form-boards represent familiar activities to a number of children, timed items with this material (and on the Bayley Scale there are more than half a dozen of these) may prove quite sound statistically.

With children for whom the material has novelty and the activity represents a problem-solving task rather than a performance of a previously learnt skill, timed items, in the light of current developmental theory (see Hunt, 1961) would appear quite unsound. At the same time, it is possible that they might have been found less satisfactory if children from a wider range of backgrounds had been represented in the construction of the test.

Several other items included in the scale seem not to meet a basic selection criterion recommended by the original innovator of the Mental Scale - Alfred Binet - that only those items which all children brought up in reasonable environments have had equal *opportunity* to learn should be included (Binet 1905). On the Bayley Scale items such as "looks at pictures in book" and "turns pages of book" are found at age placements of 10 and 12 months respectively. "Names" or "points" to pictures - black and white line drawings on a card represent items credited from 19.3 months on. Children from favoured environments are provided at early ages with the *opportunity* to learn to respond to series of such items. How many successes they score *is* likely to reflect their developmental level. In contrast, quite reasonable environments may not provide children with such opportunities till a much later age. For these children failure, which again may be on a series of test items, is seen to provide highly equivocal information regarding their developmental status. While "the item content provides a suitable vehicle for some children to give early evidence of the ability to form generalizations and classifications which is the basis of abstract thinking" (Bayley, op.cit.), for others it fails to tap these underlying mental processes. The ability may, or may not, be present.

The composition of the scale at the older age range thus appears to lack a sufficiently satisfactory selection of item content. Too large a proportion of items appear dependent on precocious experiential opportunities. Some, at least, of these might have been weeded out during the revision if sampling across a wider variety of home environments had been effected.

(c) *Developmental status is psychometrically, not psychologically defined* As an over-all consequence of the above problems (a & b), the psychometric assessment of developmental status - the Mental Development Index (MDI) - representing the child's test performance, may not prove to be a psychologically meaningful one.

The author herself recognizes that there may be some difficulty here at least where the child is "exceptional" - in this case, mentally retarded. In such instances she recommends the use of "age equivalents" to provide "a more direct estimate of effective level of functioning" (Bayley 1969 p.33). "Age equivalents", however, represent no more than an alternative transformation of the child's raw score - into a "mental age" rather than an Index or MDI - a normalized standard score with a mean value of 100 and an SD of 16. Though a mental age rather than an Index results, this is not necessarily any more meaningful psychologically; it is not related to a psychologically defined developmental sequence. Instead of being seen as so many SD units below his age group in developmental status he is seen as so many months below.

To amplify the picture provided by these quantitative scores, Bayley suggests a qualitative study of the test protocol, by means of the "Situation Code" groupings of test items. However, these groupings of test items are found to identify activities only in terms of particular sets of test material. The situation codes represent an important component of the instructions for the administration of the scale. They indicate, for instance, that a task is administered only once, though the differential scoring of the child's response may provide a series of non-sequential items on the scale. The only additional information to that required for administration convenience is an alphabetical abbreviation of the verbal description of the test material and/or activity. For example, "Q" identifies "Peg-board", "S" - "Pink board", "U" - "Jointed doll" and "W" - "Mends broken doll."

Though the scale does lay claim to tap a variety of mental processes - a claim somewhat substantiated by factor-analytic studies - the situation codes in no way identify these. Nor are they identified in relation to the actual test items anywhere in the manual. This might have been anticipated on the basis of experience with other scales such as the Binet. It is difficult to see how the situation codes could contribute to a qualitative study of the test protocol; they convey no information that has not already been acquired in the actual administration of the scale - a task already accomplished by the Examiner. At the same time, some qualitative study of test performance would seem to constitute, for diagnostic purposes at least, a necessary amplification of the quantitative picture of developmental status.

These limitations are highlighted when the scale is used with children in the 18 months + range. Here the Examiner, sensitized by the work of Piaget and his colleagues, is likely to be concerned with obtaining objective evidence regarding certain critical aspects of the child's stage of mental development - that is, on the presence of internal representation of objects and events and the emergence of symbolic functioning. This evidence is most readily available on verbal items - in a child's discriminative response to verbal stimuli and appropriate naming of objects and pictures.

However, for those children who fail to respond to such test items, this negative information may not be taken as unequivocal evidence of the lack of such abilities. The task, or the materials, may have failed to engage interest; experimental encounters with the particular content of items may be lacking. The vulnerability of the scale to these effects has already been discussed. The quantitative measure of developmental level inevitably reflects such failure; the careful Examiner will turn to a qualitative study of test performance for confirmation of this diagnostic picture. A focal concern will be with whether the child's successes are largely on items dependent on refinements of sensory-motor skills or whether there is evidence, in the child's performance on other non-verbal items, of internal representations and some symbolic functioning (success on "delayed reaction", form-board reversal, re-assembly of a simple familiar object, symbolic play behaviour etc.). All these tasks are in fact represented on the Bayley Scale, but it is left to the individual skills of the Examiner to identify them and use such information in a qualitative assessment of developmental level.

Thus, as a Scale of Mental Development, the Bayley Scale would appear to function almost exclusively as a psychometric instrument, and one with less general application than its current wide-spread acceptance in clinical and research settings would seem to indicate. The qualitative use of the child's test performance is seen to be limited, since this must be related to some sequential account of the development of mental processes such as that provided by Piagetian Theory (Piaget, 1964).

For this project, an approach based on Piaget's account of the early stages of mental growth (op.cit.) offered advantages, particularly in respect to flexibility of materials and tasks,as well to the psychologically more meaningful nature of behaviour sampled. There were, however, some obvious drawbacks. Not least of these was the need to construct a set of Piagetian-type tasks appropriate for this age range. While the early sensori-motor stage had been well mapped, this was not the case for the early period of the pre-operational stage - that from 18 months to around four years - the focus of our interest. This seemed likely to represent a major research undertaking in itself and one quite inappropriate in view of our resources and immediate needs. At the same time, the advantages that the Bayley Scale offered in providing, across the age range of the children, some continuity of assessment with the Binet Scale, both in respect to type of instrument and the nature of the data obtained, would be lost.

On these grounds it was decided to retain the Bayley Scale as the most suitable psychometric instrument available, but to supplement estimates of the developmental status of individual children with observational data both from the child's test performance and other sources.

4) The Peabody Picture Vocabulary Test (L.T. Dunn: American Guidance Service Inc., 1959)

Some critical comments

This test has been widely used in the initial assessment of children in a number of pre-school intervention programs in the U.S. (and more recently in Australia). It was selected as the "instrument of evaluation" of the national survey of Project Head Start (Anastasi, 1968). The test consists of a set of 150 plates, containing four pictures.

For each test item the child has to select, by a pointing response, the most appropriate picture to match the word spoken by the Examiner. The test comes in alternate forms with norms for children aged 2½-18 years. Test reliability figures quoted in the manual are, for pre-school age children, comparable to those of the Binet Scale with which it appears to show some congruent validity - a correlation of .71 is quoted by the author as the median value obtained from the results of several studies.

As described by the author, the test is "designed to provide an estimate of a subject's verbal intelligence" by means of a short restricted sample of behaviour - i.e. through "measuring his hearing vocabulary" (Dunn, 1959).

As no verbal response is actually required of the subject, the test is seen to be especially applicable to persons unable to vocalize well. (Anastasi, op.cit.). Initially this led to the test's acceptance as a suitable measure for screening the ability of certain handicapped children. In more recent years this same feature has recommended the use of the test with groups of children seen to be inhibited and/or limited in their verbal expression - as an acceptable test for ethnically different and lower-class children in particular. With pre-school children it has the additional advantage of meeting the need for an individually administered test but one which makes minimal demands regarding the time and skills of a trained examiner, thus making possible the processing of large numbers of children.

However, though the PPVT was introduced in the second year of our program, the test was not used as an instrument for rapid screening of either general or verbal ability nor, more specifically for assessing the "hearing vocabulary" of the children. The test was added to the initial assessment of the children more to study the value of the test, and of the information conveyed by the scores obtained, than to assess the child. The addition of the PPVT for these reasons presented little in the way of practical disadvantages as the test requires a minimum of time and occasions little resistance - in fact it has proved useful in clinical practice as a quick means of "breaking the ice" in an individual test session with a shy or self-conscious child. At the same time, as the PPVT has been more widely used in the setting of pre-school intervention programs and with ethnic and minority group young children than other tests, information obtained seemed likely to prove of value for comparative purposes.

The reasons for rejecting the PPVT as an acceptable instrument for assessing the general, or the more circumscribed aspects of verbal development that it lays claim to measure, stemmed from the limited nature of the evidence regarding the test's validity. In particular, as far as children of pre-school age are concerned, there appears to be a complete lack of substantial evidence that the test provides a measure of what it was designed to measure that has any general application. In view of the current wide-spread acceptance and use of the test in a variety of research and educational settings with young children, the bases for these objections will now be discussed in some detail.

The validity of the PPVT as a wide range test

Content validity The author claims that the method of item selection, based on the item pool provided by "Webster's New Colligiste Dictionary" established its "rational validity" as a measure of "hearing vocabulary". For older elementary and secondary school age subjects, this may provide an appropriate source of items, though problems are seen to arise when a "recognition" vocabulary rather than a vocabulary of "use" is involved - a point which will be discussed later in relation to the norming of the test.

This source of items cannot be taken as establishing the "rational validity" of the test as a measure of hearing vocabulary for younger and, in particular, pre-school age children. Dictionary listing of words reflects the verbal repertoire of the adult speech community, not necessarily the home repertoire (Fishman, 1970) of the young child.

They are largely acquired referentially, through exposure over time in educational settings, not experientially, in the primary group settings of the home and its environs where the acquisition of the child's initial hearing vocabulary takes place - and indeed a good deal of its subsequent development. It will be necessary to return to the issues raised here when problems specific to the pre-school levels of the PPVT are discussed.

Construct validity The author's aim in sampling "hearing vocabulary" is to provide an estimate of the subject's verbal intelligence. However he does not produce any evidence in relation to the construct validity of a measure of hearing vocabulary as a test of verbal intelligence. The only support for this claim is that the vocabulary tests of the Binet and Webster Scales are seen to correlate more highly with total scale I.Q. than other items, in the case of the Binet, or sub-tests in the case of the Webster. Both these vocabulary tests require the oral definition of a word in a relatively small set (compared to the 150 items of the PPVT) of carefully selected and graded items. The construct validity of these vocabulary tests as measures of verbal intelligence has been empirically established by studies carried out on these two scales and relates solely to these particular vocabulary tests - it cannot be taken as evidence for the construct validity of a quite different "vocabulary test" as a measure of verbal intelligence. To the extent that "congruent" validity can be taken to establish the "construct" validity of a measure, evidence for this is far from satisfactory. No attempt was made to establish the congruent validity of the test, with either the Binet or Webster Scales as criterion, during the process of test construction, for the full-range of the test, or any part of it. The evidence the author quotes here comes from a heterogeneous collection of data obtained subsequently, in various studies, often from small samples of atypical children - institutionalized, physically or mentally handicapped, heterogeneous in age, if not in ability. The median value of the correlations obtained between PPVT and Binet and Webster Scale I.Q.s approximate .70, but this cannot be taken as an indication of the extent to which the tests are measuring the same thing, without additional data. For some samples, the size of the correlation indicates some congruence, for others very little.

Predictive validity According to the author, the test was designed to predict school success and, as he puts it, the predictive validity of the test becomes a matter of "paramount importance". Despite this, neither in the construction stage of the test nor subsequently has its predictive validity been established. This contrasts sharply with the efforts of Binet, virtually at the turn of the century. Having put together his 1905 scale, Binet checked that the classification of pupils on this scale agreed with their current school performance - that the test had construct validity as a measure of the child's ability to profit from instruction. This was the first step in establishing its "predictive validity" - that the measure provided by the scale could be usefully employed to make predictions regarding a child's likely success in the tasks required by the school situation. This first step does not appear to have been taken with the PPVT. At the same time the only study giving any indication of the predictive validity of the test, published prior to the issue of the 1959 Manual, was one showing this to be low at Grade 1 level.

The author, tabling this finding, comments that the test is likely to be a much better prediction from Grade 3 on. Though this may well be the case, evidence to substantiate it is lacking.

The validity of the test as a measure for general use in the population. The PPVT has been used as a "national" instrument within the U.S. and when used in Australia, test norms are most commonly referred to as "American norms". The sample on which the test was normed, however, was drawn from white children and youths "residing in and around Nashville, Tennessee" (Dunn, op.cit.). No check would appear to have been made on the extent to which this sample reflected the composition of the white American population in general on such characteristics as level of occupation, education, urban/rural residence and so on - standard practice in safeguarding against bias even where more rigorous methods of sampling are employed. The test may have been designed, initially, for use with exclusively white subjects, necessitating the exclusion of non-whites, though this is not stated. As a national instrument however it lacks validity and, without re-norming, is inapplicable to those groups of the population not represented in the norming population, but who have, more recently, become a highly significant proportion of the subjects with whom the test is used. This applicability of a test to a population for which that test was not designed is seen as a particularly critical issue when the behaviour sampled is "hearing" vocabulary - a vocabulary, not of "use" as Anastasi (op.cit.) describes it, but one of recognition. Both the size and content of a person's vocabulary of recognition are seen to be highly susceptible to the specific demands of their immediate social and educational milieu. College students, for instance, are known to have recognition vocabularies far in excess of their vocabulary of "use", reflecting their need to comprehend communications from a wide variety of sources (Miller, 1951). The necessity for extensive comprehension of the "standard" repertoire of the speech community varies considerably with the person's interaction with the formal institution of society, quite apart from the capacity to develop such comprehension. Thus differentials related to social class, ethnic group and ecological distribution are all likely to be large.

The validity of the PPVT at the pre-school level of the test
The doubts raised above as to the validity of the PPVT as a wide-age range test become more emphatic at the lower age levels. The sample on which the test was normed at these age levels appears even more unsatisfactory - the geographical basis was more restricted and no check was carried out as to whether the bias towards upper S.E.S. levels, for which pre-school samples are notorious, was present here. Thus there is no guarantee that the satisfactory growth curves reported for the items retained in the test would be replicated in data from a more comprehensive sample of white American pre-school children. In view of the fact that there is little else to recommend the rather large and heterogeneous collection of items used to measure the child's "hearing" vocabulary and estimate his verbal ability, this *is* disquieting.

There seems to be little "rational" validity for the items selected, and certainly no cogent reason for the expectation that they would form part of the young child's every day vocabulary of "use".

Again this is in sharp contrast to the vocabulary test at pre-school levels of the Binet and to other items at this level which are seen to load on the same factor of "verbal comprehension". The "Picture Vocabulary" items require that the child name line drawings of what are largely familiar household objects; other items, that he produce a relevant association to words from a similar range - key, stove, ball, for instance.

The inappropriateness of a test based on a recognition vocabulary at pre-school age

As indicated above, any "rational" validity the item content may possess for older children is not seen to hold at this age level. It could be argued that a wide ranging test of recognition vocabulary such as the PPVT has little basic construct validity at this age as a measure of a child's vocabulary of use, much less verbal ability. Sociolinguists such as Fishman (op.cit.) see the young child's verbal repertoire as restricted to that of the "hearth and home" and it seems unlikely that any standardized test of a recognition vocabulary would do justice to the variety of hearth and home experienced. Varieties of a language are seen to exist in all modern speech communities, though the diversity represented may be marginal linguistically. However it is just those linguistically unimportant differences - lexical and phonological rather than syntactical - that are likely to affect the child's performance on a test such as the PPVT. That is, the label given to things (and the things labelled) and how such words are pronounced, are likely to differ between the Examiner (and the test constructor) who use a standard variety of the language, and the young child who may use a non-standard. At the same time "how a thing is called" in the case of the young child, as Roger Brown has pointed out (1958), and whether it is labelled differentially at all, depends very much on the "non-linguistic" activities of the adults who rear him. Even without variety of language, there is likely to be variety of activities - particularly where the ecological settings are different (i.e. rural/urban and inner city suburban).

Other pre-school scales, where verbal comprehension items contribute to the over-all measure of ability, make much more limited demands than the PPVT on the child's familiarity with the lexicon - e.g. the Merrill Palmer Scale in particular. A high or low level of familiarity with a large collection of lexical items from the standard variety of American English is not seen to provide information that is relevant to developmental issues. What it may provide is information regarding the child's position in relation to this standard variety of the adult speech community, the extent to which he and his family participate in this communication network. As sociolinguists see it, he will acquire this standard variety as a result of exposure over the years to the formal institution of school - at least this is seen to be an important function of this institution in our society (Fishman op.cit.).

Limitations of the PPVT as a measure of language development or language deficit

Vocabulary items are more appropriately regarded as measures of conceptual, rather than strictly linguistic, development. They are taken to be an indicator of level of symbolic functioning - an indirect measure of the child's symbolic representation of his world as the latter is, largely, inaccessible to the Examiner.

Verbal comprehension tests, such as Vocabulary items, may represent far from ideal measures of the child's level of symbolic functioning. Thought at this age is not seen to be dependent on language - at least the weight of available evidence supports this position (Furth, 1966; Sinclair, 1969; Lenneberg, 1967). Vocabulary items, however, constitute one of the most readily available measures of the child's functioning here, since they are relatively easy to construct, administer, and standardize, compared to items that are perhaps more appropriate.

As measures of language development per se, or as indicators of language deficits, the status of vocabulary items is much less equivocal. They appear to provide information that is quite inadequate and which may be misleading for certain groups of children. In contrast to our current state of knowledge regarding children's acquisition of grammar and phonology, and of their developmental sequences, little is still known of the processes involved in vocabulary growth and of developmental sequences here, as well as the role it plays in language development. What is known suggests that estimates of size of vocabulary are not sensitive measures of development and that differentials relate more to the use made of language than to its acquisition (Menyuk, 1971a, 1971b). The items of the PPVT are made up of singular and collective nouns with a few gerunds, adverbs and adjectives. They are thus limited largely to the same form class and one which would seem to evidence the largest differentials related to class in the spontaneous speech of school beginners (Brandis and Henderson, 1970). It could be anticipated that the test performance of children from homes where the purposes for which language is used differ, as well as the variety used, may be quite depressed in relation to the norms of the PPVT - to be at an immature or retarded level here. Their acquisition of language, of a linguistic system may be, however, from a developmental stand-point, substantially normal.

Conclusions

Thus the PPVT is considered to lack basic construct validity as a measure of either intelligence or linguistic development with pre-school age children. No congruent validity for the test, at this level, has been established with other acceptable measures of intelligence. At this stage it is difficult to see how any congruent validity could be established for the PPVT as a measure of linguistic development. What little is known of its predictive validity in regard to academic success in the early school years indicates that this is, on the author's own admission, low. Its chief virtue as a psychometric instrument would seem to lie in the minimum time, effort and skill that are involved in obtaining a quantitative assessment. In view of the lack of validity of the measure obtained in relation to the purposes of assessment, this is seen to be a highly dubious asset. The test does prove an indication of how similar children, or groups of children, are to the standardization sample in Nashville, Tennessee. For comparative purposes this may prove to be useful.

5) The Illinois Test of Psycholinguistic Abilities (Kirk, McCarthy & Kirk, 1968)

Two sub-tests from this test - the Auditory Association Test and the Visual Association Test - were included in the general test program. The Auditory Sequencing Test was used with a number of children, and certain individual children were given various other ITPA sub-tests. These were added to the test program in the second year of the project for reasons similar to those that determined the inclusion of the PPVT. Again, the ITPA test has been used, though not so widely, with groups of children involved in interaction programs here and in the U.S.A. and with other samples of part-Aboriginal children, so comparative data were available which might prove useful. At the same time, inter-test comparative data were of interest; the project children's performance on the ITPA Scale could be compared with that on the basic instruments and we could gain some idea of the nature of the information conveyed by group results on the ITPA.

As the ITPA was found to be much less acceptable to the children than the PPVT, as well as a good deal more time consuming, the number of sub-tests that could be included was strictly limited. The reasons for our decision not to use the scale as a whole as a basic instrument for assessing current level of functioning in the area of "Psycholinguistic abilities", as well as the basis for selection of these particular sub-tests, are outlined below.

The ITPA test is based on a theoretical model of communication, derived to some extent from communication engineering models. These aim to provide the specifications for all the purposes and all the levels that are, apparently, involved in the understanding and speaking of a language (Osgood 1957). Though the test itself does not incorporate all the potential features of the model, a significant number are thought to be incorporated. Thus the sub-tests are identified on the basis of the distinctions drawn in Osgood's model of communication between different levels of organization, different psycholinguistic processes and different channels of communication - the three basic dimensions of psycholinguistic abilities, according to Osgood.

In the ITPA battery, two levels of organization are distinguished - a higher, "representational" level - sufficiently organized to mediate activities requiring the meaning or significance of linguistic symbols (McCarthy & Kirk, 1963, p.1.) and a lower level of organization, the "integrative" level, (represented here by a sub-level of this, the automatic-sequential level) dealing with the non-meaningful use of symbols, principally their long term retentions and short-term memory" (p.11). Three psycholinguistic processes are distinguished: 1) a decoding process - obtaining meaning from certain stimuli (visual or auditory); 2) an encoding process - expressing meaning in appropriate responses (words or gestures); and 3) an associative process - the intermediary stage where symbols (related to auditory or visual stimuli) are internally manipulated. Channels of communication - the sensory paths involved in the linguistic symbol reception and response - are represented by two combinations of channels - an auditory-vocal (auditory input/vocal output) and a visual motor channel (visual input/manual output).

In the experimental version (1963), only nine individual sub-tests representing abilities, regarded as distinguishable in terms of channel, process and organization level, were realized. Two additional sub-tests were added to the 1968 edition of the test.

Despite this appearance of comprehensiveness and specificity in the range of sub-tests provided by the ITPA, its status as a meaningful measure of a child's psycholinguistic abilities is dubious and seems likely to remain so. The premises which inspired and guided the construction of the test represent at best only one of the major theoretical approaches to language - a probabalistic information processing model. In the intervening years since the test's initial construction, this theory has steadily lost ground to a structural, linguistic approach, in the face of an accumulating body of evidence obtained from careful linguistic analyses of extensive samples of the young child's spontaneous speech (McNeill, 1966, 1970; Menyuk, 1971).

The sub-tests of the scale appear to sample quite inadequately the young child's language behaviour, and at the same time, this sampling is in no way independent of general intellectual skills: total score on the scale correlates significantly with Binet I.Q. scores, as do several of the sub-tests independently. (See data from original standardization, McCarthy & Kirk, 1963, p.59, and that from the validity study, McCarthy & Olsen, 1964, p.73). This is not surprising as at least 6 of the 9 sub-tests of the original version show some similarity to items or sub-tests on the Binet and WISC Scales. The ITPA does offer a fairly clear-cut distinction between cognitive tasks involving what are more characteristically termed verbal modalities and non-verbal modes of functioning. However, some of the value of this is lost by the low test - re-test stability co-efficients for a restricted age range on the "non-verbal" tests such as Motor Encoding and Visual Motor Association (McCarthy & Kirk, p.31). Differences observed in a child's performance across these modalities may reflect little more than the unreliability of the sub-test scores. The tests with the highest reliability co-efficients (Aud. Association and Aud. Sequencing) are in fact quite direct analogues of familiar intelligence test items (Verbal Analogies and Digit Span).

The auditory-vocal channel - that is, the verbal sub-tests (with the exception of Aud. Sequencing, measuring auditory short-term memory) are seen to be largely measures of the development of conceptual language similar in their function to many of the verbal items of general intelligence scales. The evidence available indicates that such measures are highly susceptible to social and ecological factors - to social class, ethnic, rural/urban residence as discussed previously in relation to other instruments (Binet, PPVT, etc.). For children from families not represented in the standardization sample of the ITPA (a random sample of white children residing in a medium-sized urban complex in Illinois and showing, at pre-school levels, a marked bias towards upper occupational levels), tests of this type are thought to provide an even less appropriate basis for assessing psycholinguistic abilities than general intellectual ability.

Thus, while a majority of contemporary psychologists would take measured intelligence to reflect, inevitably, such cultural influences, a majority of psycholinguists would regard language development, in terms of competence, as being relatively invariant across such differences of milieu (Lenneberg, 1964, Menyuk, 1971).

The only sub-test of the ITPA test which, superficially, might be thought to lay claim to assess linguistic "competence", though premised on a quite different theory of the acquisition of grammar, is the Auditory-Vocal Automatic Test, subsequently renamed "Grammatic Closure". However, what this test is seen to require is largely a knowledge of English inflections, a mastery of what McNeill sees as "one of the most peripheral parts of language" (McNeill, 1970, p.1100). Also, it is an aspect of language highly vulnerable to dialect differences (Labov, 1964) and exposure restricted to the "hearth and home" language variety of the pre-school child (Fishman, op.cit.) discussed earlier in relation to the PPVT.

The young child may be quite competent linguistically but fail items because he has been exposed to a somewhat different variety of inflections, or because he is at a stage of over-generalizing a rule. In both instances rules have been abstracted and competence acquired. At the same time, ambiguous features of the test format itself require the child to discover the specific nature of the task - a cognitive rather than a strictly linguistic feat. Thus the child may indicate in his spontaneous speech that the present progressive "ing" inflection is appropriately and flexibly used but fail to produce it in response to the particular test item of the pictured dog and the verbal cue "the dog is ."

It is not surprising that this test correlates so highly with the Auditory Association Test and shows such a similar pattern of inter-test correlations and of correlations with social-class variables. From the standpoint of test construction, both the Aud. Association Test and the grammatical closure should be taken to be measuring substantially the same thing. In terms of Staats' "integrated-functional learning theory (1968), that is, in fact, what both tests are; they are both measures of controlled word associations. And further, as Staats observes, "a child who comes from a home where he has acquired good grammatical word association will perform better on (intelligence) tests and in learning tasks." But word associations are not seen to provide a satisfactory account of how the child acquires language (Gibson 1969, Miller, Galanter, Pribram 1960) nor a sensitive measure of what he has acquired, (Goodman 1968).

The distinction made by the ITPA Test between the three psycholinguistic processes at the representational level of the auditory-vocal communication channel while useful, perhaps in communication engineering, does not appear particularly meaningful psychologically. Associative processes and the internal manipulation of symbols are involved to an important extent in the process of "auditory decoding" or verbal reception (Deese, 1965) as well as "encoding" - that is, verbal expression. At the same time the ITPA sub-tests of "decoding" (receptive) processes and of the "encoding" (verbal expressive) processes provide inadequate measures of verbal skills that are distinct.

This distinction has been found to be a highly significant one in specifying differential development and abilities in language (Reynell, 1969) and in intelligence (Guilford, 1967) and the need for adequate measures of expressive language and divergent cognition is increasingly recognized. This is also seen to be an important aspect in assessing the abilities of children from lower class and ethnic minorities, often handicapped on verbal comprehension tests but not on ones of expressive language and divergent production (Sitkei & Myers 1969).

The Verbal Expression (Vocal Encoding) Test of the ITPA would seem to provide neither a particularly stable (it shows the lowest test - re-test reliability co-efficient of the verbal tests) nor meaningful measure of this ability. In McCarthy & Olsen's validity study, the Knox cube test, rather than any verbal test, showed the highest inter-test correlation with it).

This criticism of the ITPA has been directed at the meaningfulness of the measure it provides, as this is seen to be the appropriate question to ask of a test deliberately designed to meet certain theoretical expectations and provide useful information, primarily, about the subject's performance in the area of psycholinguistic abilities. Reese and Lipsitt (1970) claim that, as regards intelligence tests, the only operational definitions of validity are in terms of criterion measures - either concurrent or predictive. That is, our interest is not in the intelligence test performance per se but in whether the test gives "useful information" about other areas of the subject's behaviour. In the case of the ITPA this is not seen to be so, though neither the concurrent nor predictive validity of the test in terms of the criterion measures used (McCarthy & Olsen op.cit.) appear satisfactory. Ebel (1961) however has argued, that these measures of a test's validity should be restricted to situations where independent measures are either feasible or necessary - when tests are used to predict or when they constitute convenient substitutes for more exact but more laborious methods. This latter situation in particular is the case with the PPVT, as we saw above. Neither situation would seem to hold for the ITPA, which scarcely constitutes a convenient substitute measure and was not designed primarily as a predictive one. Here is a case where meaningfulness, as this author suggests, should replace validity as a first concern. Certainly the criteria, either pre or post-selected by McCarthy and Olsen, do not inform us as to what many of the sub-tests "are supposed to measure".

Despite the fact that in certain settings and where additional information is available, the test may have value as a diagnostic tool, the issue of the meaningfulness of the measures cannot be avoided. Thus Bateman, in a monograph devoted to the diagnostic usefulness of the ITPA observes that the first question asked after any psychological instrument has been administered is: "What does it mean?" (Bateman 1968). At the same time the authors of the ITPA regarded it as essential to demonstrate all the four types of validity discussed by Cronbach (1960) including its construct validity, on the basis that the test "will be used to diagnose linguistic problems and to assess treatment over time (McCarthy & Kirk op.cit. p.35).

This ambitious program is far from being realized and in view of the highly dubious nature of the measure of psycholinguistic abilities provided by the scale, it seems unlikely that it will be.

The appropriateness of the ITPA as an instrument at pre-school age levels

For early age levels of the range of the ITPA, a more basic issue than that of the validity of the test is seen to emerge - namely that of the appropriateness of the instrument. Before children can stand independently, certain weighing scales are regarded as inappropriate instruments for measuring weight: while a child has to be physically supported on the instrument, his weight, though measurable, cannot be ascertained. Psychological scales represent indirect measures of characteristics, and competence must be estimated from performance on the particular test items of the scale - a complex procedure. Where test items do not, in fact, provide a stimulus for performance it is not possible to invoke this complex procedure of estimating competence. As in the case of the weighing machine, if the child does not place his performance on the scale, this characteristic cannot be measured even where the instrument is properly calibrated. This situation is seen to hold for the ITPA scale, where a certain proportion of younger age children do not so much fail particular test items, but fail to take the test itself. The tasks on which the child is expected to perform are inappropriate for this younger age group - a situation recognized by Frostig (1968) who does not recommend the diagnostic use of ITPA below age five years.

The current widespread use of the ITPA with pre-school children involved in intervention programs is indeed surprising in view of its apparent inappropriateness as an instrument below the five-year-old level. That it should prove an inappropriate instrument at younger levels is perhaps not unexpected in view of the account of test construction outlined by McCarthy and Olsen (1964). The basis of task selection was largely theoretical and the criterion for the retention of items was their statistical behaviour in small "probing samples" - almost certainly even less representative than the standardization sample proved to be at this age range. Thus, not until the standardization of the test was under way, was it discovered that norms could not be established for the lowest age range, the two year olds, "because of difficulty in using this instrument on so young a group" (McCarthy & Kirk, 1963, p.21). While McCarthy and Olsen (op.cit.) admit that a "comprehensive observation program" could have been utilized to establish the content validity of test items, they saw this as too "arbitrary and subjective" an approach, preferring "less direct but more objective indices" (p.23) as provided by the statistical analysis of the data from "probing samples". Even a limited observation program might, however, have revealed the variability and unreliability of the young child's level of responsiveness to demands for highly focussed cognitive activities such as those contained in the sub-tests of the ITPA. Where there are analogous items on other scales (e.g. the Verbal Analogies Test of the Binet) they are introduced into the test at much later levels than the lower limit of 2½ years of age on this test.

On the evidence, it seems that ITPA cannot be regarded as an appropriate instrument for use with the younger age levels of the range for which it was, ostensibly, designed.

Neither, on the basis of the points discussed earlier, can it be regarded as a valid measure of psycholinguistic abilities. Rather than being regarded as the most comprehensive test available here, it would seem a more accurate assessment of the situation to conclude that there is no comprehensive or adequate test of psycholinguistic abilities available. What diagnostic value this scale possesses would appear to derive largely from the provision of a dichotomous classification of sub-tests into auditory-vocal (auditory) and visual-motor (visual) channels of communication. However this is seen to be closely analogous to the verbal/non-verbal modality - a distinction traditionally drawn within the item content of general ability tests. On the ITPA Scale, this channel identity is combined in most of the sub-tests with other inadequately substantiated distinctions between psycholinguistic processes and levels of processing, so that its value is diluted.

Thus it seems quite doubtful that what the tests of motor encoding (manual expression)and vocal encoding (verbal expression) measure differs only in the channel involved. Neither seem adequate samples of expressive ability in verbal or gestural language and both are characterized by the unreliability of the measure in any case. The grammatic closure test (auditory-vocal automatic) is scarcely the auditory-vocal channel equivalent of the visual closure test. The visual-motor (verbal) sequencing test is not independent of the auditory channel - "verbal mediation" would seem to be involved in this visual test and others such as the Knox Cube. At the same time, neither in theory nor in practice, can auditory reception be regarded as independent of association processes; nor indeed is auditory association independent of receptive or expressive processes. A general linguistic ability factor emerged in all three processes, with the association test showing the highest loading. There was, however, evidence of a "rather regular relation of the visual motor association with the auditory vocal association test" (McCarthy & Kirk 1963, p.62) in the inter-test correlations of the standardization data. Thus at least these two sub-tests involving both channels, or both a verbal and a non-verbal modality, appeared also to be measuring processes with something - not perhaps appropriately termed "association" - in common.

The Auditory-Vocal (Auditory) Association Test and the Visual-Motor Association Test

In view of the somewhat tedious nature of the administration of the complete scale at any age level and its limited acceptability as a task at pre-school levels, only these two sub-tests of the scale were selected for comparison purposes. They were seen to have the advantage of offering contrasting modalities or "channels" in the presentation of tasks involving somewhat similar demands - the meaningful relating of symbolic items. The task in both sub-tests could be interpreted as one involving, in Spearman's terms, the perception of relations and the eduction of correlates. The auditory association test may be regarded as a measure of Cattell's "crystallized ability" - as indeed it had been found to correlate significantly with other accepted measures of this, such as the Binet Scale and the similarities sub-test of the WISC in particular. The visual association test may be seen to qualify as a measure of Cattell's "fluid ability" factor correlating significantly with a "visual" type of intelligence test such as the Raven Matrices (McCarthy & Olsen, 1964, p.18).

Thus these sub-tests parallel to some extent the Binet and Leiter Scales, though, as measures, neither are seen to provide as reliable or as valid a set of scores. At the same time they seemed to offer, in combination, a useful and parsimonious approach to examining the performance of groups of children on representative sub-tests of the ITPA Test, without the necessity of subscribing to Osgood's seemingly inadequate model of the nature of psycholinguistic processes and the measure of these that the ITPA Scale provides.

The Auditory Sequential Memory (Auditory-Vocal Sequencing) Sub-Test

In the ITPA model of psycholinguistic abilities, this sub-test, together with Auditory Vocal Automatic (Grammatic Closure), is taken to measure auditory vocal channel processes at the "non-representational level". This is the level dealing with "the non-meaningful use of symbols, principally their long term retention and the short term memory of symbol sequences" (McCarthy & Kirk, 1963, p.11). The tests measuring abilities at this level are presumed to be "non-culturally dependent" (Bateman 1968). Bateman claims that the inclusion of the AVA sub-test here, despite its obviously high semantic component, is justified on the basis that the grammatical usage, as measured by the test, is acquired automatically or on a habit basis.

The empirical evidence available, including the data published with the experimental edition of the test, as well as subsequent research reports such as Bateman's own (ibid.), all indicates that the test is as culturally dependent as the Auditory Association Test - one at the representational level. The two tests inter-correlate at a highly significant level, load similarly on the general linguistic ability factor in the author's factor analysis of test data, and evidence much the same pattern of correlation with such experiential variables as are represented by social class and ethnic group membership. The theoretical basis for identifying such a test as the Auditory Vocal Automatic as a measure of the "non-meaningful use of symbols" appears questionable - if indeed the behaviour implied by this term can be said to exist.

Thus Miller et.al. (1960) argue that all human behaviour, not just speech, is characterized by organization. As these authors see it, an organized representation of the environment must mediate any observed correlation between stimulus and response in the behaviour of human beings. A subject's responses to such a test, even where "nonsense" words and "nonsense" figures constitute the stimuli, inevitably reflect this characteristic of human behaviour. Indeed children's responses to such stimuli do indicate an organized representation - a meaningful use of these symbols which though "nonsense" are not meaningless, as McCarthy & Kirk (op.cit.) themselves discovered.

On the other hand, the Auditory-Vocal Sequencing (Auditory Sequential Memory) would appear to be measuring an ability not inappropriately identified as at a "non-representational level". The nature of the stimuli and their mode of presentation largely prevent any organized representation on the part of the subject. Empirical data from studies using the ITPA consistently indicate that this sub-test, in contrast to the AVA, is essentially, "non-culturally dependent" to use Bateman's term.

Indeed the test profiles of the "culturally disadvantaged" children presented in this particular author's text show scores "peaking" on this sub-test; all other auditory-vocal channel test scores are below the mean - that for the Auditory Vocal Automatic markedly so.

Similar findings have been reported from other studies where ITPA has been used in the pre-testing of target children in pre-school intervention studies (e.g. Klaus & Gray, Karnes, 1970). At the same time, data from the published studies on the test construction of ITPA suggest that this particular sub-test, unlike the majority of sub-tests, provides a measure of a relatively independent factor, and a consistent and stable measure at that. The few inter-correlations between this sub-test and others on the battery appeared meaningful - moderate but significant inter-correlations were observed with both the Auditory Association and Auditory Vocal Automatic sub-tests. Thus it might be concluded that the Auditory Sequential Memory sub-test is measuring, reliably and at some level of generality, an ability related to the acquisition of aspects of language measured by these two sub-tests, but one which is at the same time relatively independent of them.

The authors of ITPA describe the sub-test as measuring the ability to repeat correctly a sequence of symbols, as a test of immediate auditory recall resembling the standard digit repetition test (McCarthy & Kirk, op. cit. p.12). The reason given for making certain alterations from the "standard test" administration procedure was to increase the test's discrimination (compared to the repetition of digits items on the Binet Scale) across the age range of ITPA. These alterations however, in particular the change in rate of presentation from one per second (standard) to two per second, would seem to change the nature of the task in a quite significant manner. It cannot be assumed for instance that in this altered version it holds the same relationship to general intelligence that has been found in many studies with the standard memory span test.

In a summary of studies identifying Catell's general factor of fluid ability as distinct from a general factor of crystallized ability (Horn, 1968), memory span tests emerge with a factor co-efficient on this general fluid ability only a little below tests of figural relations such as the matrices - widely regarded as measures of pure 'g'. Indeed Horn, outlining this theory of fluid general ability, presents memory span tests as having a pre-eminent status in its assessment. He sees them as fairly pure measures of what he terms "anlage function" those basic capacities of central neural organization that govern intellectual performance and the only kind of behavioural function manifested at early "preconceptual" stages of development. Eysenck (1967) also has argued that the demonstrable significant relationship seen to hold between memory span and general intelligence (as measured on the Wechsler Adult Intelligence Scale) suggests that it is an important basic component of a scientific,as distinct from a technological,concept of intelligence.

Memory span tests with their slower rate of presentation would seem to be measuring the efficiency of a consolidation process that takes place after stimuli have been registered but before this material has been transferred into long-term storage (Eysenck, op.cit.).

What the more rapid presentation on the Auditory Sequential Memory Test would seem to provide is more a measure of this registration process - a measure of "immediate echoic memory" (Neisser, 1966), most appropriately measured, according to this author, by just such a rapid presentation. To Neisser, the intact functioning of immediate echoic auditory memory represents a "sine qua non" in the perception of the stimuli of speech, stimuli that are, by their very nature, sequential. Thus auditory input is always extended over time and some form of transient memory must, of necessity, be preserved for long enough to permit perception of these sequential stimuli. At the same time, such a preliminary transient storage mechanism is seen to be relatively unaffected by experiental influences. On this basis such a test as the Auditory Sequential Memory sub-test of the ITPA would seem to have a certain unique potential for the detection of dysfunctioning in the neural organization underlying the perceptual integration of speech stimuli. In particular it would seem to have the advantage of measuring perceptual as distinct from conceptual functioning, unlike the other auditory vocal channel test of ITPA and, in consequence, to be relatively "culture-free".

However, any test of this nature does demand, particularly in the young child, a certain level of development in attentional behaviour and task responsiveness. Neither of these are likely to be unrelated to the general level of cognitive development or insensitive to differentials in parent-child interaction. Independence of performance in relation to "measured intelligence" and cultural experiences would seem to be a relative rather than an absolute factor. At the same time, while the test needs to be identified as different from a standard digit repetition test, it does appear to have potential as a measure of a specific ability that is to some extent independent of the particular ITPA model of psycholinguistic ability. The content validity of this sub-test - how well it samples that about which conclusions are to be drawn* - is not seen to be dependent on the ITPA manual's rationale here. The process apparently tapped by this test would seem to be one of basic importance in the perception of speech that has a role in any theory of language and language acquisition - indeed its significance has been recognized in a "cognitive" (i.e. Neisser, op.cit.) rather than a "behaviourist" model such as Osgood's. The norms provided by the ITPA manual for this and other sub-tests, as well as the availability of findings for particular groups of children, constitute an invaluable aid, however, for any diagnostic use of the test.

Thus the Auditory Sequential Memory sub-test was added into the battery for this project, as an instrument with a certain potential for detecting limited acquisition of language that might be the result of some perceptually-based difficulty in the integration of speech stimuli. It was used in the initial testing of children in the Metropolitan program and, as a majority of these were given this particular subtest, group results are included in the tables for initial test results. No repeat testing was carried out on the group - neither on theoretical grounds nor in the light of empirical data available would any significant changes here have been anticipated.

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* Manual for APA standards for Educational & Psychological Tests & Manuals, 1966, pp.12-14.

6) Assessment of Children's Language Comprehension (ACLC): Research Edition

(C. R. Foster, J. J. Giddan & J. Stark: Consulting Psychologists Press Inc., 1969)

When the research edition of this test became available in Australia it was also included in the initial assessment of some of the children in the Metropolitan program. The rationale here was similar to that underlying the use of the Auditory Sequential Memory test. This test also appeared to have potential for detecting perceptually based difficulties in handling the reception of language - in this instance the number of "critical elements" that could be simultaneously processed by the child.

In the ACLC, a core vocabulary of 50 words is used to assess the child's ability to process increasing complexity in the number of "critical elements" combined in the speech sequence. Thus, at the four critical element levels, the child has to process the subject (which may or may not contain a modifying word), the verb and the prepositional phrase.

The core vocabulary of 50 words was selected on the basis of being easy to picture, commonly used, and comprising no more than two syllables. As far as possible, the difficulty of the task in terms of the individual words has been reduced to a minimum by using short words with relatively familiar concrete connotations. The individual vocabulary items are presented first; this provides an opportunity for pre-testing the child's possession both of the lexical units and of the semantic use portrayed in the picture. This is a helpful feature when using the test with Australian children, as a few of the vocabulary items would appear less familiar to them because of a difference in semantic use. In the vocabulary test the child has merely to identify by a pointing response some common count nouns, the present progressive form of verbs, some prepositions and adjectives. At subsequent levels of the test only these same items are used in combinations of 2, 3 and 4 "critical elements".

Thus the test minimizes to a significant extent individual variation among children in the range and variety of verbal concepts possessed - an important consideration, as we have seen, in language assessment tests designed for children of pre-school and early primary school age. Further it is possible to identify specific areas of the individual child's receptive language difficulties on the basis of actual performance on the test items. Thus the child's difficulty will be revealed as stemming from a basic deficiency in the acquisition of the core vocabulary used here, or in certain peripheral items only; from processing at one or another "critical element" level; or in deficits of attentional behaviours producing an erratic performance at several levels. The test can be seen to actualize the authors' design of defining receptive language difficulties in young children and, to some extent, their additional aim of indicating guide lines for the correction of language disorders. Thus it would seem to meet the basic content validity criterion of a test (see above) of sampling with some adequacy that about which conclusions are to be drawn. No data is available on other aspects of its validity. Indeed these may be regarded as irrelevant for a test designed for these purposes, as well as premature at this stage of its development.

Ebel (1961), as previously noted, has argued that meaningfulness should replace validity as one of the major desirable characteristics of a measuring instrument. This would seem particularly desirable in the field of language assessment tests. Here one's concern is most frequently with the definition of the nature and extent of the language difficulties themselves, not with how well a measure designed for this purpose agrees with, or predicts, the score on a measure devised for some other purpose. Where this other measure may be, to a large extent, a function of general intellectual abilities or acculturation, rather than language, such validity estimates may be irrelevant if not misleading.

The test is, however, essentially a pragmatic instrument, limited to a definition of a child's performance in terms of actual behaviours sampled by the particular test items. It has not been derived from any theory of language or its acquisition and the difficulty progression of items is conceptualized in terms of the number of "elements" involved in the comprehension of a phrase, rather than in relation to stages of linguistic complexity. From a linguistic point of view it scarcely represents a measure of language comprehension, as only a very limited aspect of linguistic competence is assessed. In young children this aspect may be more dependent on the development of perceptual and attentional capacities than on linguistic ones. While the absence of test norms is not seen in itself to be a disadvantage, the lack of any normative data certainly is, particularly when using the test with younger children. Without such data it has limited usefulness as a source of developmentally relevant information. With older children however it is likely to provide diagnostic information of value when used in combination with other measures. For the young children with which the project was concerned, it also appeared to have some diagnostic usefulness, chiefly because of the relative independence of the aspects of language assessed from the conceptual abilities tapped by verbal ability scales or the Auditory Association sub-test of the ITPA.

Metropolitan program: psychological testing in a home situation

Chapter 10 INITIAL TEST RESULTS : GROUP REPORT

10.1 Practical procedures

The testing program operated between September, 1969, and November, 1971. During this period, teachers were in contact with 92 Aboriginal children between one month and six years of age; also with an additional 6 children from neighbouring non-Aboriginal families in the Metropolitan program. The frequency and nature of teaching contact found to be possible and appropriate varied greatly between children. The reasons for this also applied to the testing program. It was possible, however, to administer some tests of cognitive progress to 74 of the Aboriginal children (Swan Hill: N = 39; Metropolitan: 35) and to the 6 white children.

Of the remaining 18, two children missed all testing sessions since their families were out of the area at the time; one left for school before the next testing round; two died; four left the district after a very short time in the program or while still under 9 months of age; and nine children not tested were in limited contact only with the teacher and still under 2 years at the time of the last testing session.

At Swan Hill, it was only after several months of weekly visits to establish initial contact that a second white adult could be introduced into the setting with some likelihood of acceptance, and before organizing testing sessions was a practical possibility. There is, therefore, a time lag between initial teaching contact and initial tests for many of these children, although teaching records were kept from the start. In the Metropolitan area, where work was initiated in the children's homes, and there was no existing group activity between families, it was possible to arrange testing much earlier. The following Table shows the number of children from both programs tested at stated intervals from the date of first teaching contact; for virtually all the children, the initial test was the Binet scale.

TABLE 1

No. and age of children tested within specified periods from first teaching contact

Time lag from first teaching contact	Swan Hill		Metropolitan	
	yrs.mths. 4.0 +	Under 4.0	yrs.mths. 4.0 +	Under 4.0
2 months	3	2	10	13
3-6 months	0	2	3	7
7-12 months	7	5	0	1
13-21 months	5	15	1	0
Totals	15	24	14	21

Time periods do not, however, indicate consistency between children in extent of exposure to teaching help; the number and type of sessions attended during a similar time period varied greatly in both programs, and time of entry to the program affected the number of possible sessions before the next testing period. For this reason, the number and nature of teaching sessions preceding testing, rather than time elapsed, are the relevant factors to keep in mind in considering results, and "initial" tests mean first tests rather than measures prior to teaching contact. The number of teaching sessions between initial contact and first test varied widely, due to an equally wide range of practical factors. In the Swan Hill program, the range was from 1-75 sessions; this represented the extremes between a child entering the program just prior to the first testing round, and testable on entry, to one admitted well before the same round and unable to co-operate in a test situation until the following year. The median number of sessions prior to first Binet tests at Swan Hill was, however, only 17.5 sessions. Corresponding figures for the Aboriginal children in the Metropolitan program were a range of 2-21 and a median number of 10.17 sessions.

Since it was not the intention of the project to study the effects of some common treatment for all children, this unavoidable variability was not a major problem, although it must be kept in mind in any discussion of group results.

The setting for testing differed between the two programs; at Swan Hill, it was carried out in the pre-school office at Wandarrah; in the Metropolitan program, testing was done in the children's homes. Initial test sessions closely approximated an individual learning experience within the pre-school program, rather than the opportunity to display learned abilities which it affords the majority of children who attend a pre-school centre. Older children were seen on their own, younger ones with their mothers present. The oldest and most confident children were tested first so that others and their mothers had an opportunity to become familiar with the examiner and develop at least a minimal relationship with her, in advance of their own test session. It was decided to commence testing well below an estimated basal age so that successful achievement on tasks was the salient feature of the session for each child. This resulted in an unnecessarily long test session for some children, because of the widespread scatter of successes and failures which might be said to characterize the performance of the children as a group. Any disadvantage was more than offset, however, by the opportunity for gaining in self-confidence and experiences of achievement which this created for the majority of the children. This proved a particularly valuable approach in the examination of the younger children, where the examiner could share with the mother her own interest and enthusiasm in the child's successful achievements, and interpret "failures" in a positive way.

In spite of this approach, there were some children in each program whose response to initial efforts at testing did not allow arrival at a valid test score. The task was attempted again when there was apparently more possibility of establishing rapport and co-operation, and having test items actually tried. In the Metropolitan program, for example, it was not possible, on the first test round, to obtain a response to the PPVT for 5 out of the 33 Aboriginal children tested; on the ITPA Auditory Association sub test for 9; on the ITPA Visual Association for 5; and on the Leiter Scale for 11 children.

(The majority of these children were between 2.0 and 3.11 years of age). The Binet test was successfully administered to all but 2 children in the same program. It seems necessary, therefore, to make a careful distinction between "failure" on test items attempted, and failure to take the test.

For the majority of children, however, initial test results appeared to give a reasonably accurate picture of the child's current level of functioning on the scale employed.

The context for presenting and interpreting test results

As well as leaving open the matter of the educational relevance of test results, we wish to preface the following discussion of differences between groups and individuals with a reminder of the cultural position taken in this project.

1) Any value judgment attached to such differences is relative to the culture and sub-culture in which one is expected to be functioning successfully.

2) The group data presented is the result of accumulating work with individuals, as they became involved over time in a teaching program, and not the outcome of testing some selected sample. As the number of tests built up, it seemed useful to make some group analyses for purposes of comparison with other studies. Although the group represented is not the result of planned sampling procedures, it illustrates the full range of differences between the Aboriginal families known. Since different practical problems, rather than any consistent attitudes or characteristics on the part of parents accounted for the few cases not tested, there seems no reason to suspect that the group report is heavily biased in any direction, as a sample of families of Aboriginal descent, living now in urban settings.

10.2 Discussion of initial test results : group report

The reasons for discrepancies in the total number of children to whom tests were administered and differences in the mean ages at which they were administered have been indicated in the preceding procedural notes. To recapitulate briefly: the chief reasons for these discrepancies stemmed either from the nature of the instrument or the accessibility of the children. Thus mean ages for the PPVT, the ITPA sub-tests and the Leiter Scale were all higher than that for the Binet Scale. Though all four tests ostensibly provide similar lower age limits, more difficulty was encountered in administering the ITPA sub-tests and the Leiter Scale and, to a lesser extent, the PPVT to the youngest children. Consequently, for some children, initial testing with these instruments was done at a later age than with the Binet. At the same time, these instruments were introduced at a later stage of the program to the Swan Hill children. For the Metropolitan children, testing across these measures was almost complete - that is, to the extent that the children's age and continuing contact with the program made this possible. It was not possible to achieve this ooverage with the Swan Hill children as has been indicated above.

Only in the case of the Leiter Scale are the discrepancies in numbers large; but here the pattern of scores suggests that the sample tested was fairly representative of the population of children in contact with the program. The only large discrepancy in mean ages is on the ITPA sub-tests, both in relation to the age at initial testing on the other measures and in relation to program.

In the case of the Bayley Scale, the difference in numbers largely reflects the presence at Swan Hill of a much higher proportion of very young children - siblings, for the most part, of older children in the program. In view of the wide range of ages of children assessed on this particular scale, the small size of the sample, and the unequal distribution across these ages, the average score is not a meaningful figure.

Combining the individual test results of the children at initial testing on Binet, PPVT and Leiter Scales does seem to provide a meaningful picture of the performance of children as a group on these separate measures, and a basis for examining group differences in performance on the different measures. The Binet and PPVT were administered to almost all the children and the mean age and range of ages, though not identical, are comparable. While fewer children were given the Leiter Scale, the sample can be regarded as representative of the children in the program; and again the mean age is similar though the lower limit here somewhat older of necessity. The mean age taken across the three tests was just four years (4.03 years).

Group results on Binet Scale : Mean performance across both programs (N = 61)

Mean age : 3 years 10 months with an age range from 2 years 4 months to 5 years 3 months.

Mean I.Q. = 90 (rounded) SD = 12 pts. (rounded)

Mean I.Q. for the group is approximately 10 points below I.Q = 100, (the normalized standard score for the test) or .62 standard deviations below the norm of the test, representing a significant disc[illegible] As previously indicated,no Australian norms are available for this scale. Interpretation of the individual child's performance is based on the American norms provided in the manual. In the case of group results, however, these are likely to vary ecologically in Australia, as is the case elsewhere, with children residing in rural areas or in the lower class districts of cities tending to test below the norm , and those in middle class districts above it. Thus though the performance of the children as a group can be said to fall significantly below the norm of the test, it is not known to what extent they fall below the norm of the population of children residing in similar residential areas.

Distribution of scores : this was approximately normal, though there was a greater range of low scores than high scores. No child scored above +1 standard deviation from the test norm; but some children scored more than one, and a few scored more than two, standard deviations below it. The performance of the children tended to show restricted variability, the majority scoring being within -1 and +1 standard deviations from the norm of the test.

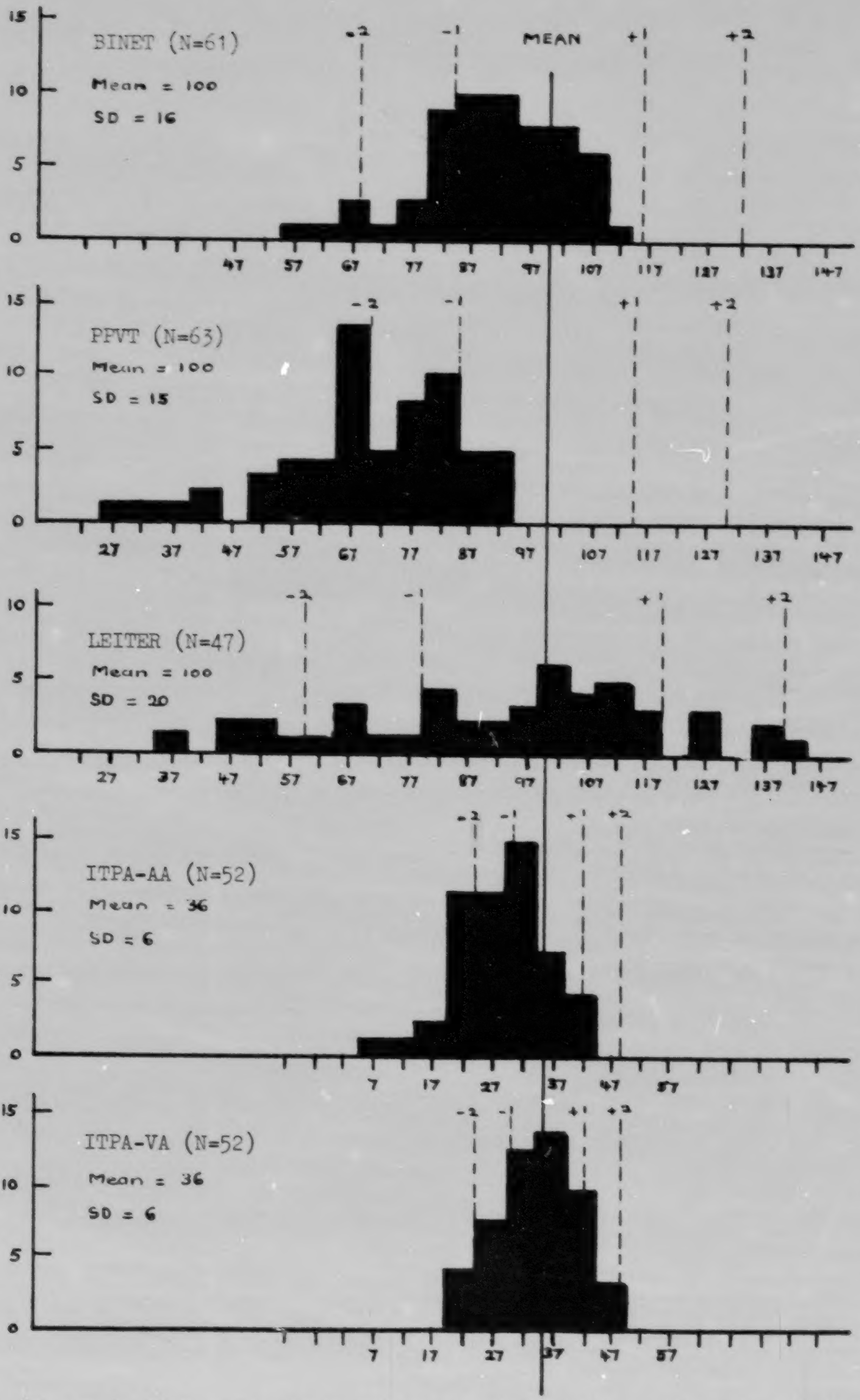

Figure 1. Histogram: distribution of scores of part-Aboriginal children on initial tests, relative to means of standardization samples (See footnote Table 2, p.114)

TABLE 2

INITIAL TEST DATA FOR PART-ABORIGINAL CHILDREN

Mean scores,* mean ages, standard deviations, and range of scores and ages (by test and program)

Test	N	Range of scores	Mean	SD	Difference from norm of test	Age range (yrs. & mths.)	Mean age
SWAN HILL PROGRAM							
Binet (Form L/M)	31	59-109	86.03	13.54	-13.97	2.6 - 5.3	3.11
P.P.V.T.	33	29- 94	67.97	18.57	-32.03	2.9 - 6.4	4. 4
I.T.P.A. (A.A.)	24	9- 44	27.50	9.11	- 8.50	3.8 - 6.5	5. 0
I.T.P.A. (V.A.)	24	21- 46	34.96	6.57	- 1.04	3.8 - 6.5	5. 0
Leiter	18	35-135	89.67	26.40	-10.33	3.8 - 6.1	4. 4
Bayley	14	50-132	83.21	21.78	-16.79	0.7 - 2.11	1.10
METROPOLITAN PROGRAM							
Binet	30	79-111	94.77	8.66	- 5.23	2.4 - 4.10	3.10
P.P.V.T.	30	56- 90	72.67	8.81	-27.33	2.4 - 4.10	4. 0
I.T.P.A. (A.A.)	28	22- 43	30.61	5.83	- 5.39	3.2 - 5.0	4. 1
I.T.P.A. (V.A.)	28	23- 49	34.79	6.04	- 1.21	3.2 - 5.0	4. 1
Leiter	29	45-140	96.41	26.21	- 3.59	3.3 - 5.0	4. 2
Bayley	4	76-119	99.50	20.44	- 0.50	0.11-1.11	1. 5
COMBINED PROGRAMS							
Binet	61	59-111	90.33	12.14	- 9.67	2.4 - 5.3	3.10
P.P.V.T.	63	29- 94	70.21	14.83	-29.79	2.4 - 6.4	4. 1
I.T.P.A. (A.A.)	52	9- 44	29.17	7.61	- 6.83	3.2 - 6.5	4. 6
I.T.P.A. (V.A.)	52	21- 49	34.86	6.23	- 1.14	3.2 - 6.5	4. 6
Leiter	47	35-140	93.83	26.21	- 6.17	3.3 - 6.1	4. 2
Bayley	18	50-132	86.83	22.02	-13.17	0.7 - 2.11	1. 9

* Binet and Bayley Scales : Mean = 100; SD = 16

P.P.V.T. Mean is a standard score of 100; SD = 15

The Leiter Scale is an age-scale and, when used in comparison with other scales, the author recommends adding 5 pts. to the quotient obtained from $\frac{\text{M.A.}}{\text{C.A.}}$ No standard deviation for the over-all scale is reported. An SD of 20 has been estimated from data in the manual relating to the age range tested.

I.T.P.A. sub-tests : Mean = Standard score of 36; SD = 6

Group results on PPVT : mean performance across both programs (N = 63)

Mean age: 4 years 1 month, with an age range from 2 years 4 months - 6 years 4 months. Mean I.Q. = 70 (rounded) SD = 15 pts. (rounded).

Mean I.Q. on this test is 30 pts., or two standard deviations below the normalized standard score of I.Q. = 100 for the test. Clearly the performance of this sample of children on the tasks sampled by this particular test is quite significantly different from the sample of children on which the test was standardized. Again, no Australian norms are available and the American norms provide the basis for the interpretation of the scores of individual children when the test is used here. It seems unlikely, however, that local norms would accomodate a discrepancy of this size. At the same time, as has been indicated earlier, tests of "recognition" vocabulary such as the PPVT are especially vulnerable at pre-school levels to the impact of both group and individual experiental differences. It is not known whether the large deviation from the test norm evident in the group results represents as gross a discrepancy in relation to the performance of children residing in similar residential areas. Some unpublished data from a small sample of Melbourne pre-school children showed the sample as a whole, from a mixture of working class and lower middle class residential areas, to be testing at two-thirds of a standard deviation below the test norm for the PPVT, but a sub-sample from an inner industrial area tested at two standard deviations below (Clough, 1971) - that is, at a similarly "deficient" level to this part-Aboriginal sample.

Distribution of scores : on this test the distribution of scores does not approximate a normal distribution. There is a marked tendency to bi-modalism, with one peak registering just below -1 standard deviation from the norm of the test and another just below -2 standard deviations. At the same time a small group of children score below -3 standard deviations. Thus the mean as a measure of central tendency here does not accurately reflect the group's performance, but is somewhat depressed by the build up of very low scoring children. At the same time, not only is the mean well below the test norm, but the upper limit of the range of scores fails to actually reach this norm. In view of these features of the distribution of scores, data obtained from the test, may not - for this sample of children - be useful. In the case of the Binet Scale, though the mean was negatively displaced in relation to the norm of the test, the distribution of scores was approximately normal. On the PPVT however, not only is the mean of the sample grossly displaced in relation to the test norm, but the distribution of scores does not approximate a normal distribution and shows a "peaking" of scores on both sides of the sample mean.

Group results on Leiter Scale : mean performance across both programs (N = 47)

Mean age: 4 years 2 months with an age range 3 years 3 months to 6 years 1 month. Mean I.Q. = 94 (rounded) SD = 26 pts. (rounded)

As results on this test were to be compared with those obtained with other instruments, five points were added to the ratio I.Q. obtained, a procedure recommended by the author of the scale which has already been discussed. Problems in the comparative use of this instrument remain, however. Unlike the other tests in the battery, the mean on this scale does not represent a normalized standard score with a specified standard deviation. It is an age scale, on which the "average" child is presumed to obtain a quotient of approximately 95 and for which the standard deviation is presumed to be equivalent to that of the Binet Scale (16 points).

Data published in the manual suggest that the standard deviation for pre-school age children is closer to 20 points and has been taken at this size for comparative purposes here. On this basis the mean for the sample of children is approximately 6 pts. or .3 point of a standard deviation below the norm of the test. Whether the standard deviation of the test is taken to be as large as 20 pts. or approximately that of the Binet Scale, the mean of the sample shows a discrepancy of less than ½ a standard deviation from the test norm. At the same time, though the group of children taking the Leiter test failed to cover the sample of children in the program, the range of scores suggests that it was representative. Variability of scores is extremely large, again suggesting that at least for this age range the standard deviation for this scale is substantially larger than for the Binet Scale.

Distribution of scores : though markedly flattened, the distribution of scores is approximately normal; there is a balance between high and low scoring children, though again a tail of a few very low scoring as on the Binet and the PPVT. As was the case on the Binet Scale, the largest group of children falls between -1 to +1 standard deviations of the norm for the test. Again there is a group of children who score below -1 standard deviation, but unlike the Binet Scale there is on this scale a small group of children who score above +1 standard deviation from the test norm.

The extreme variability of the scores in a sample of this size indicates the extent to which this particular scale discriminated children's performances. In view of this, it may well not be meaningful to regard the mean of the sample as reflecting a central tendency in the group; it would appear to represent rather an averaging of a wide range of positive and negative scores. Indeed the value of the scale would seem to lie in the provision of just such a discriminatory picture of the individual child's strengths and weaknesses on the cognitive tasks that make up the scale. In this respect, the group of children tested was seen to be quite heterogeneous. At the same time the group results did reveal that, on a test of "non-verbal" cognition, there was represented in the sample a number of children of potentially very high ability, which balanced to some extent the group of children with demonstrably limited abilities on this and other tests. While the wide dispersion of the scores of the group does not appear to be meaningfully subsumed under a measure of central tendency, neither can the over all performance of the group be taken as significantly different from the norm of the test.

Group results on Bayley Developmental Scale (N = 18): Mean performance of group

Mean age: 1 year 9 months with an age range from 7 months to 2 years 11 months.

For this particular scale the age range of the children tested was extremely wide, and there was a very uneven distribution of ages in the small sample. Only a very few Metropolitan children had younger siblings in contrast to Swan Hill. At the same time a number of children in the age range 2 years 0 months - 2 years 6 months were examined on the Bayley Scale at Swan Hill because of difficulties in establishing a Basal age on the Binet, and in one instance a 2 years 11 months old child whose Bayley D.Q. was extrapolated. The chief value of the scale was as an estimate of the developmental level at which *individual* children were functioning at an initial stage of contact with the program. Developmental quotients for these "toddlers" tended to be well below average and a small group of infants (under one year) were examined for comparative purposes. Group means have been tabled to complete the survey of initial test results. They cannot be taken as representing the central tendency in group data; the sample was quite inadequate for such purposes both at Swan Hill and in the Metropolitan area.

Mean developmental quotient As indicatedabove, it is not meaningful to refer to the average of the scores collected in this instance. The distribution of scores is markedly bi-modal. For the older children - those in the second year and upwards - scores tended to fall well below the norms for the scale and below this "average" for the sample. For the infants, scores tended to group above the norm of the test and well above this average for the sample. Thus the mean developmental quotient of 87 points (rounded) represents a point between the lower average score of older children and the higher average score of the infants.

However, even with a larger sample of children, more evenly distributed across the age range, it seems unlikely that the figure provided by a developmental scale - a developmental quotient - constitutes a meaningful descriptive summary of the developmental status of a group of children of varying ages. Statements that certain developmental behaviours were manifested or not in some proportion of children at specified ages provides a useful descriptive summary of group behaviours. The mean developmental quotient for the group, calculated from performance on a heterogeneous collection of items, does not.

10.3 Comparison of group data on three measures - Binet, Leiter and PPVT 'I.Q.'

All three tests are seen to provide measures of some general ability that is normally distributed in the population. Despite controversies as to what each test actually measures, there is some concensus that the Leiter Scale provides a "non-verbal" measure of general ability, comparable to the more "verbal" measure of the Binet Scale, and that the PPVT represents a quick screening device for measuring the more verbal aspects of ability, and so, on this score, is also seen as comparable.

The three tests are also taken to be measures that apply to the population in general, the norm of which corresponds to I.Q. = 100 with a variability of approximately 15 points of I.Q. On this basis it might be anticipated that all three tests would behave somewhat similarly as measures, allowing for a certain variation in the group means and in the scores obtained by individual children on the three tests. Discrepancies here might have been expected to be most marked in the case of the Leiter Scale.

The group data indicate that the Binet and Leiter Scales do appear to be measuring some ability that is approximately normally distributed in this sample of the population, the distribution of which is somewhat more restricted in the case of the Binet than of the Leiter Scale. The restricted variability on the Binet Scale, and the somewhat depressed sample mean, could both be taken to reflect the component of "overlearnt" abilities, seen by Ferguson (op.cit.) as contributing to the stability of measured intelligence on this and similar scales. With the more novel tasks making up the Leiter Scale, constraints both on minimal and maximal level of performance are reduced. Thus, as is seen in the group data here, the top and bottom levels of the range on the Leiter Scale are wider, the SD much larger, and the sample mean somewhat less depressed in relation to the norm than holds for the Binet Scale. In terms of the categories defined by the Tests, the group means for the sample of children on both scales is, in fact, similar - the group mean on both scales falls into that band representing some 20 per cent of the population - individuals of average ability with I.Q.s between 90-109, though group means on both scales are at the lower limit of this band.

However, when we examine the group data on the PPVT we find that here, whatever the ability being measured, it is not normally distributed in this sample of the population. At the same time, the group mean on this test does not categorize the group into the same band of the population as the Binet and Leiter Scales but into quite a different one. The group mean, which is below PPVT I.Q. 75, categorizes the group on this test into that 5 per cent of the population defined by the test as "very slow learners" - a categorization with drastically different implications than that of low average on the Binet and Leiter Scales. In this test not only is the mean for the sample grossly displaced, in relation to the norms of the test, but even the highest scores obtained by individual children all fall below this norm.

Thus some of the theoretically-based misgivings regarding this particular test would seem to be substantiated by the empirical data from the three measures. On a priori grounds it may not be assumed that, at pre-school age levels, the ability to handle a particular set of recognition vocabulary items will be normally distributed in the general population of such children, or that test norms established on a standardization sample will have any general applicability. This situation would seem to be confirmed by the data here. At the same time, the data from this sample indicate that using the PPVT as a substitute measure of verbal ability at this age level may also not be justified even though the correlation between PPVT and Binet for instance may appear satisfactory. In this sample the correlation - between initial Binet and PPVT I.Q.- was in the order of .70. But though the two tests ranked the children somewhat similarly in relation to one another, the information conveyed by the two tests, as to how the children stood in relation to the norms of the tests - a major concern in using standardized measures - was quite different as we have seen.

The data from this combined sample would not seem to indicate that the Leiter Scale provides a culture-free measure of ability and thus is more appropriate for these children than the Binet.

Certainly it did identify some children as showing well above average ability, in contrast to their more mediocre performance on the Binet, and it discriminated more between the children. But the spread of low scores shows some of the children as being more handicapped on this non-verbal scale of ability than on the Binet - as being less able to focus and direct their attention, and persist in cognitive tasks when the verbal directions of an adult were excluded. For the more able and mature children, it may well provide a more sensitive indication of potential but this may not be so for the less mature child.

10.4 Group results on ITPA sub-tests

Note. As indicated at the start of the chapter, there are differences in the mean ages of the children from the two programs on these sub-tests (mean age for Metropolitan children was 4 years 1 month; for the Swan Hill children it was 5 years 0 months). There is also some difference in the age range. However, there are similarities in the test patterns for the two programs and the results have been combined for the discussion below.

Auditory Association sub-test

N = 52; mean age = 4 years 6 months; mean standard score = 29 points (rounded) SD = 8 points (rounded)

The mean for the group is approximately 7 points below the normalized standard score for the sub-test of 36 points (SD = 6 points) - more than one standard deviation below. This represents a discrepancy from the norm of the test that is nearly twice the size of that from the norm for the Binet Scale, but a good deal less than that on the PPVT. At the same time, the group is seen to contain both high and low scoring children, though the latter predominate and the variability of scores is large - exceeding that of the standardization sample.

Distribution of scores: this is approximately normal around a mean negatively displaced from the norm of the test, though there is a slight build up of lower scores. Thus whatever it is that the Auditory Association sub-test may be said to measure, it would appear to be relatively normally distributed in the group but with a majority of the children demonstrating some handicap here - the greater proportion of children falling below the norm of the test - between this and two standard deviations below.

Visual Association sub-test

N = 52; mean age = 4 years 6 months; mean standard score = 35 points (rounded); SD = 6 points (rounded).

The mean for the group results almost approximates the norm for the test; it is an insignificant 1/6th of a standard deviation below, and the variability of the sample is also almost identical with that of the standardization sample.

Distribution of scores: this represents the nearest approximation to normal of any of the distributions of test scores around a mean which is also unique in being close to that of the standardization sample. The bulk of the sample falls between -2 and +2 standard deviations on either side of the norm; there is only a small group of children whose scores fall below -2 SDs.

Comparison of group data on ITPA Auditory Association and Visual Association sub-tests

The contrast between the group results on these two sub-tests is sharp. On the Visual Association sub-tests, scores for this sample show an approximately similar mean and variance to that of the standardization sample. Whatever ability is measured by this sub-test, the sample of children from the program could be said to be drawn from the same population of ability as that represented by the standardization sample. This contrasts with the situation on the Auditory Association test. Here a majority of the children evidence some handicap and a small group are markedly handicapped. The mean of the sample is significantly depressed below the norm, and variability is exaggerated.

The results on the Visual Association sub-test were somewhat unexpected as several of the items contain graphic representations of objects less familiar to Australian children in general. This would seem to increase the difficulty level of the "decoding" aspect of the test. At the same time, successful performance requires an ability to follow the verbal instructions of the test and to focus specifically on the task demands. Nothing can be done in regard to the former difficulty, but it is possible to minimize the latter by a careful exploitation of the manual's instructions for the administration of the test. A permissible feature of these is that instructions on the demonstration items may be repeated, to ensure that the child has grasped the task and that subsequent pointing responses are deliberate rather than random. Bateman (op.cit.) recommends that this procedure be followed explicitly (though it is not stressed in the Manual) and this procedure, which was followed for this project may have enhanced the children's initial scores on the test. At the same time this maximal initial performance, and the somewhat erratic difficulty level of items, reduced the possibility of gains on subsequent re-testing, for some of the children, despite an apparent improvement in their efficiency at the task.

Both the Auditory Association and Visual Association tests are designed, according to the ITPA model, to measure the child's ability to relate symbols in a meaningful way, as distinct from non-meaningful symbols, or a "decoding" of symbols.

However, though it was possible to restrict the tendency of the immature, impulsive child to point to the first picture that related to the stimulus picture - whether meaningfully related or not, - it was not possible under the instructions of the Auditory Association test to curb the same child's natural tendency to freely associate to the stimulus word - to respond with the first word whether this was related meaningfully or not to the stimulus word. Consequently we have the situation, in terms of the ITPA model, of this group of children revealing a marked group tendency to an association "deficit" on one test and a lack of association "deficit" on another. In the case of individual children, different combinations were encountered. Some showed a "deficit" on both tests, some on neither, and some a very marked discrepancy between them.

However, we know from studies of children's free association to words that the type of "paradigmatic" responding likely to produce correct responses to the items of the Auditory Association test does not emerge in the spontaneous responses of children till after the pre-school period; and it would seem to reflect changes in the structure of the child's lexicon (Menyuk, 1971) - in his own "dictionary" of words. Below average scores on this test - one of "controlled association" - are likely to reflect both the size of the young child's vocabulary, and the extent to which it has been structured along the lines of that of the adult speech community. While both these developments are dependent on intellectual ability, they are also highly sensitive to the factors discussed in relation to the young child's linguistic repertoire.

In view of this it is not surprising that the group results revealed a majority of children somewhat handicapped at least in the Auditory Association test. To the extent that the test may be taken to provide a measure of the degree to which the structures in the child's lexicon correspond to those of the adult speech community, such a divergence might have been anticipated and is in line with their performance on the PPVT. Indeed it is in line with findings of the ITPA authors themselves, though these are given little prominence. These authors stress that the two Association tests are measuring a common "association" or intellective ability as manifest in the handling of different types of meaningful symbols - graphic and linguistic - and that the meaningful nature of the symbols represents the critical aspect of the task in both tests. The pre-selected criterion in the validity studies of the test was the Similarities sub-test of the WISC (McCarthy & Olsen op.cit.). However in these studies they found that the Auditory Association test had small but significant correlations with a wide range of tests including this one.

The test with which the Auditory Association sub-test had a correlation of a high order here was the spelling section of the Standard Achievement Test (.51). (Very few of the "predictive and validity co-efficients" of the sub-tests were of this order - the only others were that of the Auditory Sequencing with a memory for "Random Word" test and the Auditory Vocal Automatic with a word reading achievement test). The authors conclude that the Auditory Association test "appears to be a test of intellectual and linguistic ability with a greater emphasis on the latter than previously thought" (McCarthy & Olsen p.18).

On the other hand the test of Visual Association they regarded as validated in this same study by its small but significant correlations with two tests of a "visual type intelligence" (ibid. p.18) - the Raven Matrices Test and the Goodenough Draw-a-Man, with which this test correlated at about the same level of significance as did the Auditory Association and the WISC similarities.

Thus it would seem that a common component of both these tests is some sort of general intellective ability, whether this is conceptualized as an ability to form meaningful associations, or, more commonly as Spearman's 'g' - the ability to perceive relations and educe correlates. However the difference between them would seem to lie not just in the fact that one test calls for such ability in handling linguistic as against graphic symbols, a valuable diagnostic distinction, but that one measure is contaminated here by additional linguistic skills - of the sort which appear at later ages in spelling achievement tests. As the Auditory Association sub-test of the ITPA, more so than any other sub-test of the scale, with the possible exception of the Auditory Vocal Automatic, correlates consistently with some experiental variables such as social class, the relationship between this test and educational achievement may be mediated by these shared correlates of achievement.

The group results, then, would seem to indicate that this sample of children as a whole had much the same mean level of ability to relate graphic symbols in a meaningful way (McCarthy & Olsen op.cit.), and were as heterogeneous here, as the standardization sample on which the ITPA was normed. But the mean ability of the group as a whole to relate linguistic symbols in a meaningful way was significantly below that of the standardization sample and even more heterogeneous. In view of the group mean on the Visual Association test, a group association "deficit" in ITPA terms or a poor group level of general intellective ability does not seem the likely source of this depressed group mean. Neither would it appear to be simply that the difficulty lies in relating linguistic as against graphic symbols as the older children, at least, could manage this readily enough and could often solve the verbal analogies problems of the Binet, despite below average scores on this test. Rather would it seem to be a lack of those facilitating experiences in their everyday life which may be seen to contribute to an early convergent structuring of the childs lexicon and, as a by-product, ready and accurate responses to this, and other, controlled word association tests. Where a certain optimum level of intellectual ability is present, these experiental factors would appear to accelerate such structuring, and make readily available that store of good grammatical word associations which Staats regarded as characteristic of the middle class child, and an important component in this child's initial advantage in relation to both test and classroom situations. At the same time, these factors are likely to be continuously operative in the child's environment and not cease to function once he has entered the school. Indeed the pattern of correlations between this ITPA Auditory Association sub-test and environmental variables strongly suggest that they continue to make an important contribution to performance here.

The distribution of this sample of children's scores on this test, when compared with that of the Visual Association sub-test, would seem to indicate that a majority of children (but by no means all) lacked such facilitating experiences to some degree, and a smaller group lacked them to a very marked degree. However, a similar situation may hold for certain other groups of children in the community whose performance could also prove to be somewhat depressed in relation to the ITPA norms, established on what appeared to be, at pre-school levels, a possibly biased sample. Evidence regarding the general applicability of the test is, as stated earlier, lacking.

Differences in initial test data related to program, age & sex

10.5 Program differences in initial test data

Certain unavoidable differences already discussed in the setting and timing of the testing must be kept in mind in any consideration of differences between the test data obtained initially from the children in the two programs. All the children in the Metropolitan program were tested in private houses, either their own or the familiar home of a neighbouring child. The majority of children in the Swan Hill program were tested at Wandarrah, both because of initial and continuing differences in the structure of the two programs, but also as a result of pragmatic considerations to conserve time and energy in a very packed testing schedule. On the other hand, more of the Swan Hill children had experienced considerable contact with the program prior to initial testing - for a variety of reasons. In some cases these resulted from practical difficulties - a child was absent or ill when testing had been arranged.

In other cases the child's responsiveness in the test situation was not regarded as sufficiently adequate to guarantee a valid assessment. The "testing in the home condition" enjoyed by the Metropolitan children was seen to produce this basis for valid assessment at an earlier stage of the program; so, to this extent, the differential advantages of the two groups of children balanced one another out. It is possible, however, that the testing condition for the Metropolitan children did constitute a more advantageous setting for the child. Certainly children settled into the test situation with remarkable ease, and were generally impervious to background activities in the home. These seemed to provide a source of reassuring support rather than a distraction, and the strange adult and novel situation appeared to readily assume a cloak of familiarity against this background that was not matched by the setting at Wandarrah. However, while it is known that children are less distractible in familiar than in novel surroundings, it is not known what effect this has on test results.

Differences in initial results on Binet Scale : Swan Hill/Metropolitan

On this scale numbers of children tested, sex distribution and mean age at testing were all comparable. But age range of the Swan Hill children was somewhat wider, including as it did children who were close to, or just over five years of age at first testing.

The mean for the Metropolitan children was almost nine points higher than that of the Swan Hill children - a bigger difference between the means of the two groups than that between the test norm and the mean for the Metropolitan children. This difference proved to be statistically significant. At the same time there was a difference between the standard deviations of the two sets of scores - that for Swan Hill being nearly five points larger, or almost half as large again as the standard deviation for the Metropolitan children.

The main source of the difference between the group means for the children would appear to be the presence in the Swan Hill sample of a group of children (approximately 1/4) whose scores fell in the lowest range of the distribution. While the upper limit of the range of scores for the two groups of children is similar, the lower limit for the Swan Hill children fell 20 points below that of the Metropolitan children.

Differences in initial results on Leiter Scale : Swan Hill/Metropolitan

Numbers are not similar here - almost all the Metropolitan children, but only a proportion of the Swan Hill children, were given this scale. However, mean ages and sex distribution are similar though again the upper limit of the age range for the Swan Hill children is higher. Here the mean for the Metropolitan children was almost seven points higher - again a bigger difference between the means for the two groups than the difference between the mean for the Metropolitan children and the test norm. Again the differences proved to be statistically significant. Here however, the variability of the two groups was virtually identical and the range of scores similar. Though the range of scores is similar there is a build up of low scoring children in the Swan Hill sample but not in the Metropolitan - odd individual children obtained low scores.

Differences in initial results on PPVT : Swan Hill/Metropolitan

Numbers are comparable here, and sex distribution. Mean age as well as range of ages differ from the Metropolitan sample, largely reflecting the delay of about a year in using this test with the Swan Hill children. The mean for the Metropolitan children was almost five points higher than that of the Swan Hill children. The difference did not prove to be statistically significant and is small compared to the difference of both groups from the norm of the test. While the difference between the means of the two groups is small, the difference between the lower limit of the range is large. Again there is a group in the Swan Hill sample of low scoring children, though the top limit of the range is a little higher than that of the Metropolitan group. Differences in the range are reflected in differences in variability which are marked. Again the Swan Hill sample is more variable, with a standard deviation more than twice the size of the Metropolitan sample.

Differences in initial results on Bayley Scale : Swan Hill/Metropolitan

Comparison here is not appropriate because of gross differences in numbers, mean ages and range of ages of children in the two programs given this test.

Differences in initial results on ITPA Auditory and Visual Association Sub-tests : Swan Hill/Metropolitan

Here again the Swan Hill children were older, both because of the delay in introducing these tests but also as a result of difficulties in administering the test to the younger children entering the program at Swan Hill. Some of these failed to "take the test". There is also a difference though not a large one in numbers of children between programs.

Visual Association Test

There was no difference between the means for children in the two programs who took this test,and both the range of scores and their variability were similar for the children from the two programs.

Auditory Association Test

The Metropolitan mean here was just over three points or ½ a standard deviation higher than the mean for Swan Hill. The difference between the means of the two groups was only half that between the norm and the Metropolitan mean. The Swan Hill children were considerably more variable and the difference between the means proved not to be statistically significant. As with the Binet Scale, though the upper limit of the range of scores was similar and in both cases children in both programs scored above the norm of the test, in the Swan Hill group the lower limit was markedly below that of the Metropolitan group - this also was seen to be the case on the PPVT.

Summary The main difference on initial tests seen in results for the two groups of children is the presence in the Swan Hill program of a group of very low scoring children. Though the presence of statistically significant differences between some of the test means enables us to state that, in these instances, there is a high probability that they represent samples drawn from different populations, the psychologically significant aspect of these differences would seem to lie in the presence of this low scoring group of children. These low scores may represent deficiencies in basic cognitive ability. But what would also, if not primarily, seem to be involved is a lack of conceptual development appropriate to the cultural milieu which is premised by the particular tests. This would seem to be responsible, for instance, for the exceptionally low scores registered by some of the children on the PPVT and Auditory Association Test of ITPA - low scores not paralleled in the children's performance on either the Binet or the Visual Association test.

Some of the young children in both programs registered low scores on the Leiter suggesting that there may be a strong cultural bias in the ability of young children to focus on such cognitive tasks. However, only in the Swan Hill program were older children encountered whose scores on the PPVT and Auditory Association Test fell at a point more than three standard deviations below the norms for the tests. At the same time there were many children in the Swan Hill program with scores comparable to those of the Metropolitan children. Also, in both programs, there were children with above average scores, and on the Visual Association Test and the Leiter Scale with well above average scores. The only test excepted was the PPVT - all the children in both the programs had scores which fell below the norm for this test.

10.6 Age differences in initial test data

The initial test data was dichotomized by age at initial testing into those children who were four years and over and those who were under four years of age at the time the first test was administered. This resulted in approximately equal numbers of children in these age groupings on the Binet and PPVT tests only. For reasons outlined previously, a larger number of the children to whom the Leiter Scale and ITPA subtests were administered were in the four years and over category. We were interested in examining for age effects in the results of the initial testing; and dichotomizing the over-all sample in this manner represented a convenient break-down that produced comparable numbers for those two tests with the widest coverage.

On the basis of what was known of the test instruments themselves, it seemed not unlikely that these could favor the younger children. Thus the Binet Scale, though characterized at pre-school levels by a rather variable ratio of verbal to non-verbal, performance-type items at different ages, is seen to make increasing demands towards the end of this period, and subsequently, on the child's ability to use language for more conceptual purposes. On this basis, the younger children could have been at an advantage.

In the case of the PPVT, while the nature of the task is invariant across these levels, the difficulty level rises rather sharply. The subject has to indicate correct recognition, not only of a greater number of words, but the words themselves become increasingly less familiar. The nature of tasks on the ITPA sub-tests also do not vary with age but scoring standards are clearly adjusted to the difficulty of the tasks themselves, for the young child. Minimal performance is credited with a moderately below average standard score for the younger child. However, an older child's ability to handle the task and to score successes on a limited number of items only, rates a very low standard score indeed. On the Leiter Scale, the response behaviour required of the subject does not vary but the complexity and the conceptual content of the stimulus increases and the criterion of successful performance of these more difficult items becomes more stringent. In each case, then, it seemed possible that the instruments themselves might place the older children in this particular sample of children at some disadvantage.

TABLE 3

AGE DIFFERENCES: INITIAL TEST DATA: PART-ABORIGINAL CHILDREN

Mean scores,* mean ages, standard deviations, and range of scores and ages
(by test and age group)

Test	N	Range of scores	Mean	SD	Difference from norm of test	Age range (yrs. & mths.)	Mean
4 yrs. 0 mths. & over							
Binet (Form L/M)	28	59 - 111	90.86	13.15	- 9.14	4.0 - 5.3	4. 8
P.P.V.T.	31	29 - 91	67.32	17.20	-32.68	4.0 - 6.4	5. 0
I.T.P.A. (A.A.)	35	9 - 42	27.94	7.64	- 8.06	4.0 - 6.5	4.11
I.T.P.A. (V.A.)	35	23 - 44	34.31	5.77	- 1.69	4.0 - 6.5	4.11
Leiter	28	55 - 119	92.21	19.11	- 7.79	4.0 - 6.1	4. 7
Bayley	0	-	-	-	-	-	-
Under 4 yrs. 0 mths.							
Binet (Form L/M)	33	65 - 109	89.88	11.40	-10.12	2.4 - 3.11	3. 1
P.P.V.T.	32	38 - 94	73.00	11.70	-27.00	2.4 - 3.11	3. 2
I.T.P.A. (A.A.)	17	28 - 46	31.71	7.10	- 4.29	3.2 - 3.11	3. 8
I.T.P.A. (V.A.)	17	24 - 49	36.00	7.13	0.00	3.2 - 3.11	3. 8
Leiter	19	35 - 140	96.21	34.60	- 3.79	3.3 - 3.11	3. 7
Bayley	18	50 - 132	86.83	22.02	-13.17	0.7 - 2.11	1. 9

* See footnote Table 2 , p.114

At the same time, as the younger children were quite often siblings of the older children in the program, their position in the family might well have been disadvantageous in terms of both the amount of adult interaction they had enjoyed, and their exposure to a wider range of environmental encounters.

Differences in means and variability of scores of children four years and over and under four years

With the exception of the Binet Scale, where the one point difference between means favoured the older group, the mean scores of the younger group were higher. The largest difference was on the ITPA Auditory Association sub-test, but none of the differences proved to be statistically significant. The scores of the two age groups differed in variability - on the Binet and PPVT the older group were more variable, on the Leiter Scale the younger group showed marked variability, particularly in view of the small size of the sample. Though there was little difference between the two age groups on the ITPA sub-tests, in terms of size of standard deviations, there was a very obvious difference in the range of scores on the Auditory Association subtest. Some of the older children, but none of the younger children, obtained very low standard scores. The difference in the upper limit of the range was much less marked. A similar, but weaker effect is observed in the range of the PPVT scores. Thus it would seem that in the case of these two instruments, there was a tendency for the older age children to be at a disadvantage. The particular age-break used here and the differences in the variability of the two groups (as well as the smallish sample size) may all have contributed to reducing the significance of its impact on mean scores of the two age-groupings.

The differences in the range of scores on the Leiter Scale would appear to have somewhat different origins. A few of the younger children obtained very low scores here, and a few very high scores. For the older children, range and variability were much more restricted. Successful performance on this test in the case of the younger children tended to be something of an either/or situation. Either they already had developed certain basic cognitive capacities that seemed to constitute essential pre-requisites for performance on the task or they had not. Though the test provided the opportunity to learn to use these, and to apply them to the particular tasks that the scale presented at increasing levels of difficulty, there was not the opportunity to develop these pre-requisites during the short test session. In particular, as indicated above, this test would seem to require developed capacities for focusing on the elements of a cognitive task; the child must discriminate the nature of the task itself and the adequacy of his performance, as well as carrying out the increasingly difficult discriminations demanded by the items.

The non verbal administration permits little guidance or support on the part of the Examiner; thus well-developed voluntary attentional behaviours and self-initiated task orientation is required of the child. The chief source of variability in the older children's performance would seem to be in their ability to solve the discrimination tasks themselves. In the case of the younger children, the relative presence or absence of these pre-requisite capacities, as well as their application to the tasks, would seem to be involved.

This dual source of variability would seem to result in a less adequate instrument for generating comparable test data across the age range of this sample, despite the value of the test in providing information about the functioning of individual children's ability. These same queries arise in relation to sex differences in the next section.

The over-all results failed to reveal any marked discrepancies in the performance of these two age groups of children on the tests. It is possible, however, that an age break-down at another point might have proved more sensitive than one at four years. In particular, the Binet Scale results proved remarkedly little affected by age, as did those on the Visual Association sub-tests. Queries could be raised regarding the comparability of the distribution of scores obtained with the other tests across these two broad age groupings, though differences between the means proved not to be significant.

10.7 Sex differences in initial test data

There were, by chance, more boys than girls in the program; though numbers are unequal, the mean age and range of ages of the two sexes are very similar. Sex differences favoring girls appear on all the tests (the exception - the Bayley Scale - will be discussed separately). Those on the ITPA sub-tests proved not to be significant; those on the Binet and PPVT reached statistical significance, and differences on the Leiter Scale proved highly significant. Differences in the variability of scores were small and inconsistent.

Evidence in the literature regarding sex differences in cognitive functioning tends to be scanty and inconsistent. Most widely used tests of general abilities are in fact standardized to minimize sex differences, and this would cover the tests here with the possible exception of the Leiter Scale. There is some consensus that during the pre-school and early school years, girls perform better on most tests of verbal ability (Maccoby, 1967) and on language measures (McCarthy, 1954); but, while they are found to test higher in pre-school years they lose this advantage at high school levels. At the same time boys' superiority on spatial ability tests during these later years is not shown during the pre-school years (Maccoby, ibid.). The small differences between the sexes on the Binet and PPVT is in line with these findings, though larger differences might have been anticipated on the Auditory Association sub-test. The very large difference on the Leiter Scale (over 20 pts. difference between the means of the sexes - over a standard deviation unit) is not congruent with this data. The sort of cognitive abilities involved are not seen to differ between the sexes during these years; spatial and analytic abilities subsequently become better developed boys. But, during the pre-school period, girls have not been found to be superior.

A more likely source of the marked sex difference in performance on the scale in this sample of children would seem to lie in the behavioural pre-requisites for a successful deployment of abilities, rather than in differences in the abilities themselves. That is, the girls on average possessed better developed attentional behaviours and capacities for self-initiated and directed activity on cognitive tasks.

TABLE 4

SEX DIFFERENCES: INITIAL TEST DATA: PART-ABORIGINAL CHILDREN

Mean scores,* mean ages, standard deviations, and range of scores and ages
(by test and sex)

Test	N	Range of scores	Mean	SD	Difference from norm of test	Age range (yrs. & mths.)	Mean age
BOYS							
Binet (Form L/M)	34	60-111	88.76	12.20	-11.24	2.6 - 5.3	3.10
P.P.V.T.	35	38- 90	67.91	13.80	-32.09	2.6 - 6.4	4. 1
I.T.P.A. (A.A.)	27	17- 42	28.89	6.62	- 7.11	3.2 - 6.4	4. 7
I.T.P.A. (V.A.)	27	24- 49	34.41	6.37	- 1.59	3.2 - 6.4	4. 7
Leiter	27	35-138	86.15	25.87	-13.85	2.9 - 6.1	4. 2
Bayley	10	71-132	88.40	25.78	-11.60	0.7 - 2.11	1. 9
GIRLS							
Binet (Form L/M)	27	59-109	92.30	11.99	- 7.70	2.4 - 5.3	3. 9
P.P.V.T.	28	29- 94	73.07	15.80	-26.93	2.5 - 6.4	3.10
I.T.P.A. (A.A.)	25	9- 44	29.48	8.68	- 6.52	3.2 - 6.5	4. 7
I.T.P.A. (V.A.)	25	21- 44	35.36	6.16	- 0.64	3.2 - 6.5	4. 7
Leiter	20	48-140	104.20	23.44	+ 4.20	3.4 - 4.10	4. 2
Bayley	8	50-119	84.87	17.76	-15.13	0.11 - 2.6	2. 2

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* See footnote Table 2, p.114

There was some evidence that differences in these areas characterized the response of boys and girls on other tests, but only on the Leiter Scale did these differences have such a marked effect on performance. This would seem to occur chiefly because the administration of the test deprives the child of the adult support and direction that is a feature of the test situation with other instruments.

As we saw above, it was these pre-requisites for successful performance that seemed to create difficulties for some of the younger children and these sorts of behaviours probably constitute an important facet of what is termed "maturity" in the pre-school child. At the same time, they may be a contributing factor to the young child's adjustment to the demands of the school situation and his accomplishment on cognitive tasks there, particularly where other things such as verbal skills are equated. In this sample of children, differences between the sexes in verbal skills were small, particularly when compared to those on the Leiter Scale; it is possible that the determinants of sex differences on this scale also play a part in the observed differentials between the sexes in early school achievement. At this stage we can only hypothesize as to the nature of these determinants - that they do not lie in cognitive abilities per se is suggested by the data here on other tests and in Maccoby's review (op.cit.) of published research data.

Other possibilities were investigated. Some deficiency in colour vision might have affected the performance on the scale of individual boys in the sample resulting in a lower group mean. At least three of the boys did appear to have difficulties here; the Metropolitan sample was screened for colour vision and any of the children with anomalous results were tested at the College of Optometry. However, no consistent relationship would be demonstrated between the presence or absence of apparently defective colour vision and performance on the Leiter Scale itself . Only on a very few items of the scale could colour confusion, resulting from such deficiencies, have constituted a potential source of difficulty. A few of the boys also appeared to have particular difficulties in handling the perceptual discriminations demanded by the tasks; but excluding these cases still left a significant difference between the means for the two sexes.

Unfortunately the published data on the Leiter Scale is limited, at this age level in particular, and it could not be ascertained whether the sex differences in this sample of children have been observed to occur in other such samples. Some of the recent literature on cognitive style (Witkin, 1969) and its effects on performance on cognitive tasks, as well as on the social influences that are related to its development seemed relevant to these differences. So also did Maccoby's (1965) hypothesis that different "response styles" characterize the sexes - the boys tending to an impulsive, the girls to more passive, inhibited, pattern of response.

Successful performance on the scale may, to some extent, be seen as requiring a more differentiated "field analytic" approach (Witkin op.cit.) to the tasks but, at the same time, good attentional behaviours and task orientation are also necessary.

While in our culture, child-rearing practices experienced by boys are thought to enhance the development of the former, the latter behaviours are more characteristic of girls. We know little however, of the modal child-rearing practices in part-Aboriginal families, whether they differ for the two sexes, or indeed if there are practices which could be described as "modal". That there are differences and that these have consequences for non-cognitive characteristics of children which have relevance to performance on cognitive tasks seems plausible enough in the light of the research Witkin and colleagues on cognitive style. However, in the case of the Leiter Scale, we know too little about what are the relevant non-cognitive characteristics of children that influence successful performance on these particular tasks.

As noted in relation to the age group difference, a problem with the scale is the apparent complexity in the sources of variability of pre-school children's test performance. Analyzing results by sex raises further queries as to the comparability of group data obtained with the Leiter test at the pre-school level - sex as well as age would appear to be a complicating variable. Certainly the scale would not appear to have potential as a sturdy, culture - fair measure of the general ability of "culturally different" groups of pre-school children, if the marked sex bias of the test appearing in this sample of children is replicated in other samples. Its "culture-fairness" to the girls of the sample, whose mean score on the Leiter was considerably higher than their mean score on the Binet did not extend to the boys - their Leiter Scale mean was a little below their Binet mean.

In summary: the sex differences observed in the sample on the Binet and PPVT scales tended to be in line with general findings that girls show a certain superiority over boys of this age in their performance on psychological tests. The large sex difference observed on the Leiter Scale is not congruent with these findings which stress that differences are small and relate more to verbal skills than the spatial and analyzing abilities which appear to be components of this scale. Sex differences on the Leiter Scale are difficult to interpret as little comparative data is available; also, insufficient is known regarding what appear to be non-cognitive sources of variability in performance here. The evidence from this sample suggests that these may influence the performance of different age groups but, in particular, operate to depress the scores of boys on the test. For children of pre-school age the scale is not seen to provide a satisfactory culture-fair instrument of general ability, despite its value as a diagnostic test for assessing cognitive strengths and weaknesses in individual children.

10.8 Non-Aboriginal children : initial test results (N = 6)

A small group of non-Aboriginal children also participated in the program in the Metropolitan area and they were tested at the same time. Their results naturally are not comparable to those of the Aboriginal children: the latter represented a very high proportion of all Aboriginal children of pre-school age in the area, while those of the non-Aboriginal children represent only an infinitesimal sample of this group of pre-school children.

TABLE 5

INITIAL TEST RESULTS : NON-ABORIGINAL CHILDREN*

Metropolitan Program

Mean scores[x], mean ages, standard deviations, and range of scores and ages on each test

Test	N	Range of scores	Mean	SD	Difference from norm of test	Age range (yrs. & mths.)	Mean age
Binet (Form L/M)	6	97-133	112.00	13.74	+12.00	2.4 - 4.9	3.9
P.P.V.T.	6	77-104	90.67	8.85	- 9.33	2.4 - 4.9	3.9
I.T.P.A. (A.A.)	5	33- 46	39.80	4.82	+ 3.80	2.6 - 4.10	4.1
I.T.P.A. (V.A.)	5	34- 46	39.40	4.98	+ 3.40	2.6 - 4.10	4.1
Leiter	4	74-123	105.50	22.93	+ 5.50	3.10- 4.10	4.5

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* These were neighbours of the Aboriginal children participating who were also included in teaching sessions.

[x] See footnote Table 2 , p.114

Where Aboriginal families are housed is partly a matter of chance; it cannot be said however that the participation of the non-Aboriginal children was a chance matter - being a neighbour was, but being a participant was not. Prior to the program they had develeped a relationship with the Aboriginal family, their children played together and they were invited to participate as a result. Further they were at home. A large number of pre-school children in the area spend their day at child-minding centres and, as there is a dearth of kindergartens, few children have the opportunity to experience any pre-school program.

The main interest of this data is not in comparing the results for the two samples as they clearly are not comparable, but in the opportunity provided to compare the results in this group across the same instruments. Despite the differences in mean scores between the two groups, the PPVT mean I.Q. for this group of children is virtually as discrepant from the mean Binet I.Q. (21 pts. rounded) as was the case with the Metropolitan Aboriginal sample. For this small group of children, the information conveyed by results on the PPVT would also appear to be just as misleading. Individual children in this sample would be categorized as inappropriately in relation to their ability level on the Binet as was seen to be the case with individual Aboriginal children.

On the two ITPA sub-tests - Auditory and Visual Association - the mean scores for this group of children are almost identical as is also the variability and the range of scores. Their ability to relate "meaningful symbols" is apparently equally engaged whether the input is auditory or visual - in contrast to the Aboriginal sample. Leiter Scale scores cannot be compared to Binet as only four of the six children could be tested on this scale; however the scores do indicate a tendency for these children to be less "advantaged" here than on the Binet Scale, compared to the Aboriginal children.

TABLE 6

INITIAL TEST DATA : PART-ABORIGINAL CHILDREN (Metropolitan only)

I.T.P.A. : Auditory sequential memory sub-test

Mean scores,* mean ages, standard deviations, and range of scores and ages

Test	N	Range of scores	Mean	SD	Difference from norm of test	Age range (yrs. & mths.)	Mean age
METROPOLITAN (and total)							
I.T.P.A. A.S.M.	22	30 - 54	38.04	6.83	+ 2.04	3.3 - 5.7	4.3
4 yrs. 0 mths. and over							
I.T.P.A. A.S.M.	13	30 - 43	35.69	4.84	- 0.31	4.0 - 5.7	4.8
Under 4 yrs. 0 mths.							
I.T.P.A. A.S.M.	9	31 - 54	41.44	8.09	+ 5.44	3.3 - 3.10	3.8
BOYS							
I.T.P.A. A.S.M.	11	30 - 54	37.82	6.78	+ 1.82	3.3 - 5.7	4.3
GIRLS							
I.T.P.A. A.S.M.	11	30 - 52	38.27	7.21	+ 2.27	3.5 - 4.11	4.3

Not testable : N=4 (2 yrs. 6 mths. - 4 yrs. 3 mths.)

* I.T.P.A. sub-tests : Mean = standard score of 36; SD = 6.

TABLE 7

INITIAL TEST DATA : PART-ABORIGINAL CHILDREN (Metropolitan only)

A.C.L.C. (Assessment of children's language comprehension)

Mean scores, mean ages, standard deviations, and range of scores and ages
(by test item, age & sex)

Test item	N	Possible score	Range of scores	Mean score	SD	Age range (yrs & mths.)	Mean age
TOTAL (Metropolitan only)							
Vocabulary	10	50	35 - 48	42.60	4.62	3.5 - 5.1	4.4
2 Critical elements	12	10	6 - 10	8.50	1.24	3.5 - 5.3	4.5
3 " "	12	10	4 - 10	6.70	1.67	3.5 - 5.3	4.5
4 " "	11	10	2 - 8	4.90	2.30	3.5 - 5.3	4.6
4 yrs. 0 mths. & over							
Vocabulary	6	50	38 - 48	44.50	3.89	4.3 - 5.1	4.9
2 Critical elements	8	10	6 - 10	8.62	1.41	4.3 - 5.3	4.9
3 " "	8	10	5 - 10	7.00	1.69	4.3 - 5.3	4.9
4 " "	8	10	5 - 8	5.37	2.45	4.3 - 5.3	4.9
Under 4 yrs. 0 mths.							
Vocabulary	4	50	35 - 42	39.75	4.57	3.5 - 3.10	3.7
2 Critical elements	4	10	7 9	8.25	0.96	3.5 - 3.10	3.7
3 " "	4	10	4 - 8	6.00	1.63	3.5 - 3.10	3.7
4 " "	3	10	2 - 5	3.67	1.53	3.5 - 3.10	3.8
BOYS							
Vocabulary	4	50	35 - 48	40.50	5.80	3.5 - 5.1	4.2
2 Critical elements	5	10	7 - 9	8.60	0.89	3.5 - 5.3	4.5
3 " "	5	10	4 - 8	5.60	1.52	3.5 - 5.3	4.5
4 " "	5	10	0 - 6	4.00	2.34	3.5 - 5.3	4.5
GIRLS							
Vocabulary	6	50	38 - 48	44.00	3.52	3.6 - 5.1	4.5
2 Critical elements	7	10	6 - 10	8.43	1.51	3.6 - 5.1	4.2
3 " "	7	10	6 - 10	7.43	1.40	3.6 - 5.1	4.2
4 " "	6	10	2 - 8	5.67	2.16	3.9 - 5.1	4.7

Chapter 11 PRACTICAL IMPLICATIONS OF POINTS MADE ON TESTING

Comment from an educational viewpoint

Practical repercussions for children and not theoretical concerns prompted the review of issues in obtaining and using data from standardized tests. The detailed examination of selected aspects of tests in widespread use in pre-school projects is meant to convey the importance, in our opinion, of more appropriate interpretations and use of such data than is characteristic of current literature and discussion on early education programs. The questions and practical responsibilities to which test results are applied do need, it seems, to be more consonant with those questions which available tests are able to answer; and when applied to the educational field, their relevance needs to be specified, rather than assumed.

If children - including Aboriginal children - are not to be short-changed educationally, some re-orientation of thinking and action in the following areas seems urgent.

11.1 The use of group means as a basis for educational planning

Reports of changes in group mean performances on standardized "intelligence" tests are covering up the range of differences to which educational planning needs to be directed. This then tends to create new stereotypes, both educational and social, which operate against progress with verbally expressed concerns for children's equality of educational opportunity. For Aboriginal children, this seems particularly unfortunate since existing inequalities may be considerable.

Attention is drawn in this project to the range of scores obtained in a relatively small sample of Aboriginal children. As a group, this sample can only be described as extremely heterogeneous. The point for pre-school education is the need to plan for much greater discrepancies in levels of progress than are usually met, or could be accommodated, in the usual-sized group enrolled in pre-school centres; also to note the wide scatter of abilities within some children, apparently due to gaps in experience.

At the school level, too, it is quite evident that unless teachers' expectations of children are based on study of what has actually been learned, prior to school entry, and not on some "average" performance reported as characteristic of Aboriginal children, the progress of those with most ground to make up will probably come to a sudden halt. This has already occurred for some children from this project.

Bruce, Hengeveld and Radford (1971) explicitly report a considerable range of performance in Aboriginal children at the early school level. It is, however, their general statement that Aboriginal children "will almost certainly, as a group, perform less well at school than their Australian and migrant counterparts" (p.25) which received public attention, which has been communicated to meetings of educators, and on which plans for education tend to proceed.

On one hand, children within or above the average range in certain skills may be subject to teachers' negative expectations for a "culturally disadvantaged" population; or their skills may go unrecognized and unencouraged - especially if social conditions and practical circumstances limit their free expression. On the other hand, the extreme needs of the lowest scoring children may fail to be recognized. Once in a learning situation not adjusted to prevent total failure, the conclusion is drawn that there is something wrong with the child which needs to be rectified, not that a planned education system has not examined his needs, when it exists for just such a purpose. The starting point for teaching has been obscured by a general expectation.

The concern with group mean changes already noted has an unfortunate counterpart in the advocation of blanket teaching recipes. When it comes to adequate teaching of children - in educational difficulty or not - the task assumed in action research of trying to establish probabilities between some general goals and a general type of program is not relevant. It needs to give way to the task of identifying specific next steps for particular children and concern with how factors known to affect progress are operating, and may need modifying, in the experience of individuals.

There is nothing new in these concerns in education. The problem lies in being aware of their meaning and presence in action.

For teaching purposes, then, it is necessary to note that studies reporting lower group mean performances of Aboriginal children on standardized tests may certainly indicate the need for additional support in learning for some, and the importance of examining factors responsible; but the information which helps with the giving of additional support and action to deal with the causes of problems is not group data, but information on individual progress and personal circumstances, obtained on the basis of what is already known about factors affecting early learning.

11.2 Interpretations of initial test scores

In this project, it was clear that a number of children at all age levels were unable, for a variety of reasons, to cope with several tests on first presentation. Much significant and successful teaching had been done, then, before a valid score on test instruments could be obtained for these children.

Since there is no evidence to the contrary in most reports of experimental pre-school programs, it is possible that difference scores between pre- and post-tests do not only represent change in the cognitive abilities which a test claims to measure. Instead, there may also be change in the behaviours, attitudes, and general comprehension of tasks which allow pre-school children even to undertake a test item requiring an overt response on demand. Describing differences between Aboriginal and other Australian children at pre-school age mainly as relative levels of cognitive skill is, in the light of data from this project, likely to be inaccurate. When no score on a test item may cover both failure on the item and failure to take the test item, it is also highly misleading to teachers and parents. Low scores tend to draw intensified demands for cognitive effort, without recognition that pre-requisite learning in other areas may not be sufficiently in order to allow this progress.

Attentional skills, sharper perceptual differentiation, ability to enter into sustained communication with an adult, motivation to undertake a task, accurate recall of previous experience, intellectual curiosity, control of physical energy, responsiveness to adult interest and help with learning, - even these, of the many pre-requisites to cognitive progress require a range of conditions for learning which differ considerably from those which help - for example - concept development or classification skills.

Possibly, some of the failure to sustain initial gains from intervention programs may be due to the fact that they were not entirely "cognitive" in the first place. More accurate description of initial test scores would help, then, to take the focus off the problem as seen by adults, and redirect attention to understanding the immediate problem for children, and the factors sustaining it which are open to modification. Educational efforts to reduce differences observed might then be more successful.

11.3 The ambiguity of questions to which standardized tests are now directed

Matters of norming and the general applicability of standardized tests vary in significance, depending on the questions to which tests are applied. Conversely, one might question the significance of some of the questions to which tests are applied, and therefore whether it matters to solve the associated problems of norming at all.

Tests seem to be applied now, to two kinds of comparative questions. Problems of norming matter for one, but not for the other. They matter very much when the question asked is: "Are children from specific cultural or sub-cultural backgrounds performing at levels of general ability consonant with the average for the general population. Such a question is asked about Aboriginal children; but the norms of the tests used to measure differences place them at an immediate disadvantage, particularly at pre-school age. Whether or not a test is standardized on an Australian or American or some other national sample would seem far less relevant than whether the standardization sample determining the norm for the "general population", and the basis for comparison, represents other groups living in socio-economic conditions and with opportunities for exposure to intellectual stimulation similar to those of the Aboriginal children in question.

When this is not the case, as it seems from the review of tests in current use, not only is the size of negative differences inflated (since what is "normal" is non-representative) but there is a tendency to associate lack of progress with ethnic minorities, rather than with the social and economic conditions in which they live. Hence negative stereotypes and expectations tend to be perpetuated and may be exaggerated, with probable negative effects on the self-concepts of those so labelled. Further, remedial efforts again are directed to symptomatic difficulties in children rather than to their environmental origins.

Alternatively, if the question which one wishes to answer with test data is "What differences can be observed in the relative educational progress of children living in environments known to differ in the educational opportunities they offer, norming problems of the kind described are no longer an issue. Discrepancies between the composition of the standardization sample and that of the groups under study just represent the origins of the differences one wishes to examine. In this case, however, questions of test content take on special significance, since differences to which one is sensitized will be limited to those which particular tests measure. Since the tests themselves will have been constructed from one cultural viewpoint, the outcome is almost a foregone conclusion.

11.4 Statements of educational progress over time

Psychometric tests are now being used to measure change occurring in experimental pre-school education programs, rather than to predict achievement or to control variables in psychological research. For this purpose, quite different methodological issues in test construction need attention. Since this change in the nature of questions to which standardized tests are directed has not been openly recognized, problems of method affecting the adequacy of information obtained for educational purposes tend to be obscured by concern to report some "scientific" measures of progress.

Unfortunately, however, as in the physical sciences, a scientific instrument has no constant scientific value or validity; this is directly tied to the questions which it sets out to answer.

Discontinuity from one age to the next,in the nature of items from which psychometric test scores are derived,obscures what has been learned or not in pre- and post-test differences. Those with responsibility for planning programs and teaching children therefore lack sufficient information concerning the content of a child's progress, on which to base further planning.

The limited contribution of psychometric data to teaching responsibilities needs to be acknowledged by researchers as well as teachers, and support given to efforts to define specific varieties of learning and levels of skill in the acquisition of these. When the nature of changes expected is clear, it is possible to develop valid measures and to study factors affecting progress. More recently developed standardized tests have been directed to these ends. But in solving the problem of discontinuity in learning measured from one age to the next, and the multi-dimensional quality of previous test items, another problem has arisen for early education.

11.5 Confusion between teaching objectives and measures of progress

There is now a growing tendency to argue the educational value of changes measured by standardized tests, rather than the technical effectiveness of those tests for measuring specific aspects of learning. In the process of solving some problems of psychological measurement, educational purposes are being defined by implication.

Programs of pre-school education, described as "cognitively" or "language" oriented may deal with only a very few selected aspects of language or cognition. Usually this selectivity is not discussed directly, or it is justified on the basis of a theory of current interest to research. Reasons for lack of concern with aspects of learning not covered by test items are rarely included.

For example, even within the same general area of development, changes in "intelligence" may mean changes in ability to match a greater range of visual and verbal symbols (as in PPVT) or more efficient automatic verbal associations (as in ITPA). The program conditions under which these have been achieved are then advocated as of general value for "intellectual" or "language" development. No questions are asked, for instance, about the whole range of intellectual activity characterized by its voluntary nature which, by definition cannot be tested on demand, but must be observed in an unstructured setting. In the search for culture-fair intelligence tests, "intelligence" increasingly became something tied to manipulating visual rather than verbal symbols. In the Piagetian era, it may be interpreted as having acquired "object constancy" or the ability to "conserve" quantity or weight, and training towards the establishment of such concepts may be given time and effort.

Somehow, the measure has become the goal, and what general issue of intelligence that measure represents (such as changes in perceptual awareness, or ability to process multiple dimensions of a stimulus simultaneously) which might need to be learned in a variety of situations in order to generalize usefully, may not be identified. And when measures and objectives are not defined independently, research proceeds on self-fulfilling prophecies.

A clear distinction is needed, it appears, between progress with constructing standardized tests which generate unambiguous data on change in children, and progress with defining criteria for selecting educational objectives in general, and priorities for particular children at a particular time.

It is one thing to argue that teachers need objective measures of progress in children; but quite another to imply that what children need to be helped to learn should be determined by the nature of items in available standardized tests. When this happens, children tend to be used for immediate research purposes rather than benefiting in any way from the use of accumulated knowledge in education programs.

Chapter 12 INITIAL OBSERVATION DATA : TEACHING RECORDS

A few dimensions of learning were selected from many possibilities for recording across the group. Selections were made with a view to extending the descriptive information available from the testing program. Since for teaching purposes what is needed is information which differs for individuals, there was a limit to which teachers could meet the additional recording responsibilities of describing all children on the same aspects of development. Actually, such an effort has limited educational value. Observations on one group of children cannot replace the need for similar observations of the individual progress of children enrolled in subsequent groups, if teaching is to build on what has already been learned.

The observational data presented here are intended to serve two purposes. 1) They provide some check on the generality of some characteristics ascribed to part-Aboriginal children as a group, as a result of psychometric studies of their progress. 2) They illustrate dimensions of the practical process of learning and teaching which are not dealt with by measuring the outcome of that process with standardized "intelligence" tests. Drawing attention here to variables which describe the functioning of a person in learning situations is intentional; most studies which establish associations between content of programs and some cognitive outcome in children ignore the intervening variables which describe the interaction processes involved in effecting change. Thus they may help teachers little in knowing how to assist a child with a certain combination of abilities and difficulties to make progress from one level of accomplishment to another.

That, however, is the responsibility which teachers face. They cannot ignore the fact that the total effect of a similar program (as distinct from the probable effect of a few of its elements on a few aspects of learning) is not constant from one child to the next. Experimental action research programs should not encourage us to revert to a naive and temporarily comfortable state in which teaching responsibilities stop with those of exposing children to adult-approved environments, regardless of their personal meaning for very different children, at varying points in their development. To increase understanding of ways of helping children in early educational difficulty, one cannot consider stimulus variables in isolation. The vital conditions for learning are not described until the variables created and maintained by environment X child interactions are recognized.

For a start, there is a state of understanding communication between child and teacher to be successfully achieved, and this - for young children - is a very personal matter. The development of such a state is often of necessity a major focus and contribution of pre-school education, and has been considerably under-estimated in recent literature in this field. Parent-child relationships vary considerably in the extent to which they develop attitudes and behaviours which help children to learn with awareness, in a variety of situations and from a variety of people. It is recognized that the intuitive nature of understanding between some parents and children, and their close emotional ties, may make this task more difficult than it is for a teacher. On the other hand, it is also recognized that young children have difficulty in learning from adults who have not established positive personal relationships and communication with them, which are expressive of sensitivity to their individual experience.

("Learning" here means not just the acquisition of information or of behavioural characteristics responsive largely to external stimuli; `it means change, in the form of new understanding or increased awareness which motivates personal effort.) The extent to which such teaching-learning relationships generalize from one adult or one situation to another - for example, from pre-school to school situations, is a neglected area of study. One might hypothesize, perhaps that they need to be well beyond the stage of initial acquisition for this to occur, and that the presence of like elements in the new environment is particularly important for young children.

12.1 Learning behaviours and attitudes selected for attention

The data summarized in this chapter might best be described by the general label of "learning behaviours and attitudes." Selecting for attention specific aspects of learning in this general category was not a theoretical decision, nor does it represent affiliation primarily with a "learning to learn" school of thought. It was largely a case of recognizing prerequisites in the process whereby adults can help children to educate themselves. This is the focus of a theory of teaching, as distinct from a theory of intelligence.

Voluntary use of learning opportunities was the underlying behavioural ingredient of interest. A captive audience, which the teacher then must be able to "motivate" is not considered conducive to educational progress. We tried to record, across the group, the initial reactions of children to the learning opportunities with which they were presented, directly or indirectly. Observations were organized round the following aspects of learning.

Exploratory behaviour

How actively do these Aboriginal children respond to new forms of stimulation, and what is the nature of their responses? Are these largely on a sensory level, one of perceptual differentiation or of intellectual curiosity? Are there signs of apathy or withdrawal which might reflect habituation to low levels of stimulation? Sensory handicaps, physical fatigue, negative self-concepts or general lack of confidence might be expected on the basis of the physical and social conditions which some Aboriginal families experience. Are there early signs in children of uncomprehended previous experience, discouraging further intake, or of lack of awareness of anything to discover?

Attention - focusing, concentration

Length of time spent at one activity (beyond the stage of passing interest only) is not the point here. Observations were intended to catch the characteristic degree of absorption, of involvement in the task in hand, or the absence of an established pattern of goal-oriented investment of energy. Is concentration sustained in spite of the presence of the usual competing stimuli?

Question-asking

Evidence of efforts to act on intellectual curiosity was of basic interest. Ability to formulate questions which arise from first-hand experience is a pre-requisite cognitive skill which might well be influential in whether or not accommodation (in Piaget's terms) occurs.

Question-asking has an obvious relationship to vocabulary development and to a range of general knowledge relevant to managing the environment in which one lives.

Verbal communication skills

The concern here is essentially practical. Can children make themselves understood to a teaching adult? There has been much theoretical discussion of the relationship of language to cognitive development; but the emphasis has been on measurement of levels of existing skill in both, rather than on the factors promoting language comprehension and expression, and what active role this plays in achieving cognitive progress. The existence of language is a necessary precondition, but hardly a sufficient condition for lively thinking. Human stimulation and some minimal expectations are probably necessary precursors of early mental operations and, again, language is needed in order to communicate or check the results.

Attitudes to adults taking teaching role

What kind of a stimulus do adults present to part-Aboriginal children? Do the children seek their company? If so, for what reasons? Since teaching depends on adult-child communication, the impact of reinforcement histories and the cumulative effects of feelings experienced in early parent-child contacts meet the teacher immediately she attempts interaction. She has no option but to begin at this point, in observing progress and selecting teaching priorities.

One cannot help children learn if, for instance they anticipate punishment for every move they make; or if they avoid interaction; or if they are so involved in testing control or seeking security that they are not free to respond to stimuli other than those associated with their emotional needs. The salient qualities in adult-child interactions are very likely to be expressive of cultural differences.

12.2 The setting for observation

The physical and social setting for observation differed somewhat between the two programs. At Swan Hill, the initial observations reported for about half the children were made in a family-type group situation; in the Metropolitan program, opportunities for observation were centred in or around the home, usually with two or three children present and a mother near at hand, if not in the room itself. Observations for the more recently enrolled children at Swan Hill were made in situations more similar to those for the Metropolitan program - some in the home itself, others with very small groups of three or four children. While in both programs the physical setting was variable, other elements of the stimulus situation relevant to the responses under observation were held constant. At a general level, for example, activities planned consistently allowed opportunity for the occurrence of the behaviours of interest; the teacher made clear her invitation to children to use available freedom to see what they could do; and there was room for choice in the activities selected.

It was noted, however, by teachers that in home teaching sessions psychological conditions appeared to exist which created certain restraints on children's use of freedom for self-initiated activity. The contribution of the more neutral setting of a pre-school centre, where children can more readily risk being wrong, and pre-established requirements of children do not exist, is no mean factor in the development of voluntary involvement in learning.

The presence of other children and the more generous space factor in a pre-school centre dilute the adult's concentrated attention, sometimes an uncomfortable source of tension if a less confident child feels that his every move is under observation. Our teachers have reported having to make a conscious effort to create an atmosphere of psychological freedom in the home setting, which throws teacher and child into concentrated interaction at a pre-arranged time and for a pre-determined period.

This experience was of interest in view of rather opposite problems of teaching in pre-school groups 25-30 children. It reminds one that too early participation in formalized learning situations may induce self-consciousness in some young children. Awareness of the problem, however, allowed teachers to adjust their own behaviour and therefore to keep important general conditions for both observation and teaching more comparable. A teacher working with children at home could, for example, move sufficiently out of range to reduce tension to minimal levels by taking the opportunity to talk with parents, in another part of the room.

The frequency of behaviour during one session was not the focus of concern. Observations were oriented to documenting the presence or absence, over a specified period of time, of certain varieties of behaviour (indicative of learned abilities), relative emphases within one child's activity, and the level of independent behaviour of which he showed himself capable.

At a specific level, elements of the stimulus situation, relevant to the behaviours observed, were held constant across children, since they were built into the operational definition of the behaviour to be observed. For example, exploring "on own initiative" excludes immediate reactions to direct urgings from parents to "go and play with the toys", or to the control-maintaining device which often keeps children in a group in perpetual motion - "what about finding something to do!"

12.3 Stimulus variables and describing behaviour

The observations in this section are considered merely a start in describing, with some degree of scientific care, variables reflecting the outcome of exposure to hopefully educational experiences. They could be viewed as "with-in child" variables which interact with other aspects of development to affect progress with learning. But conceptualizing the behavioural responses observed as the outcome of individual encounters with a planned teaching environment holding certain characteristics is more accurate than viewing them as established personality factors which could be predicted independently of stimulus situations.

In everyday life, we differentiate outwardly identical behavioural acts by the circumstances in which they occur; they can acquire quite opposite meanings under different stimulus conditions. In discussing children's educational progress, however, this double source of meaning sometimes goes unrecognized. Pronouncements are made about children's "failure" at school, as though this were not relative to a certain set of environmental conditions in the setting in which that result occurred; these not only help produce but affect the description of the result. For reasons, then, both of clarity of definition and of the educational consequences for children, there is an effort here to differentiate not only behaviours, but also the stimulus conditions under which they can be observed or learned. The code categories used to describe responses incorporate key stimulus variables.

Describing children's progress with any aspects of learning is only possible if what "progress" entails is clear. This is not made evident by describing change in the tasks presented to children as a result of moving from pre-school to school, or from one classroom to another, or by listing qualifications obtained.

Both the positive direction of a general area of learning and progressive levels of adequacy in specific dimensions need to be stated. There have been more attempts in education, it seems, to set out sequences of curriculum content than to set down the levels of progress in children with which this is thought to help. This whole problem is immense. Again, in this project, there is an attempt to make a start rather than to continue long-standing circumnavigations of the problem.

The general direction of learning under study in this observational data was that of increased initiative and responsibility-taking in children for their own educational progress, for using learning opportunities and resources for learning-human and otherwise - to advantage. Levels of progress in a few selected aspects of this general class of behaviours and prerequisite skills and attitudes are described by the codes used to summarize teaching records, and which appear in this report in conjunction with the findings.

12.4 Initial observations of learning behaviours and attitudes in two groups of part-Aboriginal children

In contrast to testing records, data reported from "initial" observations were obtained from the first four teaching sessions attended. These were consecutive for some children, but not for others. This number of sessions was thought to allow the unfamiliarity of teacher and situation to wear off a little, without allowing time for significant effects on the aspects of learning under observation. As in the usual pre-school program, the emphasis with new children was on creating a balance of security and freedom which allowed teachers to discover what children had already learned, against some minimal expectations established on cultural grounds, and against a background knowledge of child development. From the observing end, therefore, early teaching sessions allowed opportunity for any established patterns of response to certain kinds of environmental stimuli to become evident.

Problems of selective recording in teaching records are recognized, and reliability checks in this setting were not possible. In this case, however, the major selections were made in advance; the nature of records required retention of behavioural evidence; and the aspects of learning of interest were defined in operational terms. As illustrative material for discussing teaching priorities, they are considered to have validity.

The following data cover all but seven children in contact with Van Leer programs between February 1969 and December 1972. (The exceptions are very recent enrolments at Swan Hill - all under 2 years - and two children for whom initial test results were reported whose families moved away before teaching contact following testing was possible.)
Additions to the group for whom test data are reported total 29 Aboriginal and 6 white children (Swan Hill : 18; Metropolitan : 11 + 6); 21 of the 29 additional Aboriginal children, and 3 of the 6 white children were under 2 years of age at initial observation.

Age groupings for initial observational data refer to age on initial teaching contact and not to age on testing, as in the previous chapter. This lowers the top age group by about six months.

The number of children functioning at various levels of development is reported for separate programs and age groups; these are combined where the behaviour under discussion makes it appropriate to compute percentages for a larger N.

Teaching records were coded by the Project Co-ordinator who was not involved directly in recording most of this information.

Exploratory behaviour

How actively did children in these groups respond to new forms of stimulation from both physical and human environment? When given opportunity for exploration, what were their predominant responses?

"Opportunity" in the context of self-initiated investigation has certain meanings to pre-school teachers which it may be useful to define here. It means a stimulus situation with the following ingredients: partial unfamiliarity in what is visible to children; a clear indication that they are free to handle and try out objects, or to interact with people present; an intermittent schedule of social reinforcement for self-initiated investigation; adult protection where necessary of children's freedom from direction by peers; and a planned selection of play materials and situations which, being appropriate to physical and social skills and interests, are likely to be attractive and fun for children so that intrinsic reinforcement for voluntary engagement in them operates consistently. In other words, there is an effort to create optimal conditions for self-initiated exploration of one's immediate world and one's relationship to it. In addition, the environment has built-in safety features which enable teachers to take the responsibility of allowing this degree of freedom to other people's children.

In the groups observed, characteristic individual responses can be summarized in the following categories:

Code

1) Investigated immediate environment, play materials, on own initiative

2) Investigated with some adult encouragement

3) Made little or no active response, even with encouragement

X Information insufficient for coding

("Investigate is seen as something more than physical contact or disinterested manipulation; attention is engaged although this may be at a sensory rather than a cognitive level.)

TABLE 8

Children's initial exploratory responses in teaching sessions

Code	Part-Aboriginal				Non-Aboriginal
	Combined programs (N = 101)		Swan Hill (N = 57)	Metropolitan (N = 44)	Metropolitan (N = 12)
2 years and over (2 years 0 months - 5 years 9 months) N = 64					
	N	%	N	N	N
1	30	46.9	18	12	3
2	26	40.6	7	19	5
3	8	12.5	3	5	0
Under 2 years (0 years 3 months - 1 year 11 months) N = 37					
	N	%	N	N	N
1	18	48.7	16	2	0
2	10	27.0	6	4	4
3	8	21.6	6	2	0
X	1	2.7	1	0	0

There was certainly no picture of apathy or disinterest in the majority of children's reactions to opportunities for exploratory play. In the Metropolitan program, the teacher commented early on the children's readiness for materials which engaged their interest and challenged their skills. Most of their homes appeared to provide little of this type of stimulus for learning. Often interpreted as disinterest or lack of knowledge in parents, the absence of play material was found to be, at least in some homes, a simple matter of economics. One mother commented that she had, at times, restricted the extent to which her children played with neighbours, since the fact that they had no toys to share was a source of embarrassment and social hurt. Whether or not this should have been so, it was clearly a factor affecting early learning about both social and physical worlds. (The solution to this problem requires thought for both children's developmental needs and the value system of a non-acquisitive culture.)

The somewhat higher proportion in the Metropolitan program of children two years and over who were not independent of the usual degree of adult encouragement to try out and to investigate would seem to bear out the differences discussed in the setting for observation in each program.

Perhaps, too, the more psychologically restricted home situation also set more physical limits. Children in the Metropolitan program were thought to spend more time inside than those at Swan Hill, and were more accustomed to controlling physical energy; much exploration in the Swan Hill group was characterized by large rather than small muscle activity, and children here seemed subject to few expectations from parents that this be controlled indoors.

A breakdown of results by age showed that all categories of response occurred at every year of age, in both programs.

In the small proportion of children who remained inactive in the presence of environmental novelty, it was evident that the reasons varied. Theoretical interpretations of this behaviour (such as habituation to a low level of sensory stimulation, or failure to develop normal physiological structures for processing incoming stimuli) would be very misleading, and program planning based on such interpretations would have merely increased children's problems. Providing positive teaching help required awareness of influences on this behaviour as diverse as these : apparent withdrawal from the over-stimulation and confusion found in life in a small house with 5-6 adults and as many as 10 or 11 young children; severe physical fatigue; physical handicaps sufficient to affect mobility; fear of punitive action from adults as a consequence of normal activity; lack of experience as a result of over-protective parental attitudes; generally abnormal physical development; anxious, over-controlled behaviour in response to high parental standards; or extreme shyness and lack of confidence.

From observational data, it appears that the Aboriginal children in the two groups observed are not suffering from severe sensory deprivation. Where there are signs of early behavioural abnormality in response to stimulation, it is important to label these descriptively as inactivity, rather than to interpret them as apathy. Then one may investigate possible causes at an individual level, and plan educational support accordingly. The absence of any such difficulties in the small white sample observed is noted. Possibly this reflects a lower frequency of multiple family problems, and a more adequate state of health in children.

Concentration, attention-focusing

Was the active exploration of most children observed characterized by sustained effort and the degree of absorption usually associated with productive attempts to learn? It has been stated already that the definition of investigatory behaviour included the requirement that attention was engaged. One needs to ask, however, if this was merely momentary or more sustained; and if it survived competing distractions and showed some evidence of goal-oriented effort - whether this was, for instance, a matter of detailed examination of objects or of early experimentation?

The following categories were used in an effort to differentiate behaviour along the dimension of concentration or absorption. As with any behavioural learning, it is a matter of abilities plus motivation. It was necessary to allow for the absence of a predictable pattern in some children.

Code

1) Maintained concentration independently, in spite of the usual competing stimuli (eg. the presence of other people, alternative choices of materials, activities)

2) Inconsistent pattern; contrasts during one session in whether activities developed beyond point of initial discovery

3) Did not sustain effort, interest, even in the absence of direct interruptions

(Non-verbal cues expressive of affect, such as facial expression, body posture, energy investment, and tone of voice or vocalizations provide additional evidence of degree of involvement. These, rather than time span differentiate behaviour; remaining physically with one repetitive activity for a long period may serve as one of the best ways of avoiding personal involvement in anything.)

One further level of progress could be described as "maintaining concentration despite direct interruptions." It is possible that some behaviour coded in category 1 reached this level of independence. Teaching records, however, did not contain the information needed to make this distinction with confidence.

TABLE 9

Initial observations of concentration, attention-focusing

Code	Part-Aboriginal			Non-Aboriginal
	Combined programs (N = 101)	Swan Hill (N = 57)	Metropolitan (N = 44)	Metropolitan (N = 12)

2 years and over (2 years 0 months - 5 years 9 months) N = 64

	N	%	N	N	N
1	37	57.8	17	20	4
2	16	25.0	6	10	4
3	9	14.1	4	5	0
X	2	3.1	1	1	0

Under 2 years (0 years 3 months - 1 year 11 months) N = 37

	N	%	N	N	N
1	16	43.3	15	1	1
2	6	16.2	5	1	1
3	4	10.8	2	2	1
X	11	29.7	7	4	1

The gaps in data for children under one year to some extent reflect the fact that they were less accessible to observation. At the early stage of contacts, teachers were careful to maintain a situation in which parents could take the initiative to seek any sustained physical proximity, when it expressed positive feelings or a readiness to communicate. Since very young babies were kept close to parents, and usually well covered up in prams or baskets, only brief interactions including some of them were possible in the early stages. There appeared to be a shared feeling of pleasure and enjoyment between parents over children at the more helpless stage which was not so evident once they reached a degree of physical mobility and self-assertion. It was in such intimate situations as those where a few parents gathered round to admire a baby that it was important for teachers to express non-intrusive attitudes. In some cases, it would not have helped developing contacts to assume that Aboriginal parents wished to share their deeper feelings with a relatively unfamiliar white adult.

In general, concentration across the group seemed within the usual range. At both older and younger age levels, the majority of children were readily absorbed in purposeful activity, given an appropriate choice. For others, this pattern was not firmly established and re-direction of energies by the teacher was still needed. A small proportion of children had more serious difficulty in sustaining attention sufficiently to accomplish a goal or develop a theme in play. Though active in exploring, their behaviour had a driven, hyperactive quality which effectively prevented them, quite literally, stopping to think, and screened out adult efforts to communicate. Several children with such characteristics may be found in many pre-school groups. Excluding this minority, one might draw the conclusion that there were no special problems in the area of concentration.

The data do not, however, allow this generalization. It is necessary first to ask, "On what did these children concentrate?" Two elements of the stimulus situation need to be noted here : 1) activities were self-selected; 2) stimuli were largely visual. It is not legitimate to conclude, then, that concentration extended to tasks set by others (as in formal schooling), to maintaining an intellectual set, or even to other forms of sensory stimulation. That many children, even at four years of age, found auditory stimuli of less interest was evident in the difficulty they had in sustaining attention to recorded music, to the teacher's voice in general, or to stories without pictures. This problem was particularly evident on days at Swan Hill when the "family group" sessions were well attended. At times, these were a severe test of anyone's concentration! Space was limited; the age range was wide; social experience of both adults and children was highly variable; and, as will be seen in data following shortly, skills of communication were almost non-existent in many cases.

While the descriptive categories for "concentration" incorporated elements of the stimulus situation relating to strength of concentration, clearly they were inadequate in differentiating this behaviour according to its object. There are, therefore, questions remaining about the usefulness of the general term "concentration" in observational records, and about the relationship of the data just reported to children's development. The engagement of sensory receptors - ensuring, certainly, that experience (within a limited range) registers - is an initial step only towards the development of intellectual curiosity or ability to learn from experience.

It is at this point that skills of communication and motivation to communicate with adults need to be examined.

Question-asking

The pre-school program introduced a suddenly wider variety of objects, people, and experiences into children's lives. Children's reactions indicated that much was unfamiliar. To what degree did they take any initiative in finding out, from those adults available, the names or uses or qualities of play materials, or something about the teacher and why she was suddenly present in their homes? Question-asking is characteristic of pre-school children who are intellectually alert, and who have learned to make some active effort to understand their personal experience.

Since early forms of interrogation usually occur with parents rather than teachers, and observation is difficult until a level of verbal skill allows more obvious forms of questioning, data on this aspect of learning excludes children under 3 years of age. Teaching records over the first four sessions in the Metropolitan program included an account of whether any questions were asked about the teacher or the materials she brought or about the project car in which she arrived. Awareness of the significance of this aspect of self-initiated efforts to learn for Aboriginal children developed after some months of work at Swan Hill; initial observations are limited to the Metropolitan group. The following very simple distinction was made between children.

Code

1) Asked questions during teaching sessions about teacher, materials, car (of mother or teacher)

2) Asked no questions concerning the above

X Information not available

TABLE 10

Question-asking in 3 - 4 year old children : Metropolitan program

Code	Part-Aboriginal (N = 25)	Non-Aboriginal (N = 7)
1	N = 3	N = 2
2	N =17	N = 4
X	N = 5	N = 1

The small number of non-Aboriginal children provides little basis for comparison; but the absence of any display of intellectual curiosity in the majority of the Aboriginal children is striking. Whatever the cause, there was no attempt in most cases to seek information, so that this source of understanding new experience was eliminated.

As in most cases, there are many possible explanations for the absence of behaviour which might usually be expected. The most obvious possibilities are two. Children might have been reticent in asking questions from a strange adult, or even from their mothers in her presence. (Since many of the children and adults participating were as fair as the teacher herself, it is unlikely that non-Aboriginality was a salient influence on children's responses.) Further, they may have lacked skills of verbal communication, or established patterns of verbal interaction originating in the need or wish to know. Information on the frequency and quality of verbal expression follows directly.

Expressive language

Teaching records included information on the presence or absence of speech and on its clarity. Whether or not children talked to the teacher spontaneously was also noted.

Code

1) Non-verbal during teaching sessions

2) Using grunts, signs, gestures to communicate

3) Using words, but speech incomprehensible or teacher can understand only with much difficulty

4) Some problems of pronunciation, but can usually make self understood

5) Talking clearly

Categories 3, 4, & 5 were qualified by : a. spontaneously; b. with encouragement; c. only on request

Since communication with the teacher was the point of interest, data refer to teaching sessions mainly. "Non-verbal", therefore, may not be a consistent state of affairs. While the frequency of self-initiated verbal contacts might vary in other situations, the degree of clarity in speech represented a more constant matter of ability.

More than half the Aboriginal children of $3\frac{1}{2}$ years or over had no difficulties of verbal communication which would not be expected in most pre-school groups. These data indicate that it is inaccurate to state that Aboriginal children, of the age usually attending regular pre-school centres, have language problems with *cultural* origins. There is no general picture; neither did children showing more verbal competence come only from families in which one parent was non-Aboriginal.

On the other hand, there was a far higher proportion of children not in verbal communication than one would expect for this age group in general. Although it must be kept in mind that many young children might not talk freely to a relatively unfamiliar adult, there were other indications that language limitations were not merely motivational. Later experience bore out the absence of even minimal vocabularies for some; and when positive affect expressed directly to the teacher indicated a degree of acceptance and security, serious communication difficulties still remained.

TABLE 11

Expressive language : presence or absence and clarity of children's efforts to communicate with teacher

Code	Part-Aboriginal		Swan Hill	Metropolitan	Non-Aboriginal	
	Combined programs (N = 101)		Swan Hill (N = 57)	Metropolitan (N = 44)	Metropolitan (N = 12)	
3 years 6 months - 5 years 9 months (N = 38 + 4 N-A)						
	N	% of age group	N	N	N	
1	9		3	6	1	
2	1	44.7	1	0	0	
3	7		2	5	0	*
4	6	55.3	5	1	0	
5	15		6	9	3	
2 years 0 months - 3 years 5 months (N = 26 + 4 N-A)						
	N	%	N	N	N	
1	7		2	5	0	
2	3	76.9	1	2	1	
3	10		6	4	0	*
4	5	23.1	2	3	0	
5	1		0	1	3	
1 year 0 months - 1 year 11 months (N = 24 + 3 N-A)						
	N	%	N	N	N	
1	12		9	3	1	
2	7	83.3	6	1	0	
3	1		1	0	1	*
4	2		2	0	0	
5	1	16.7	1	0	0	
X	1		1	0	1	
Under 1 year 0 months (N = 13 + 1 N-A)						
	N	%	N	N	N	
1	4		2	2	0	
2	4	69.2	3	1	1	
3	1		0	1	0	*
4	-		-	-	-	
5	-		-	-	-	
X	4	30.8	4	0	0	

* Children above dotted line not in verbal communication

N-A = non-Aboriginal

Moving down to the 2 - 3½ year old group, comparison with expectations of non-Aboriginal children indicate greater discrepancies. Although percentages are somewhat distorted by small Ns, they give some indication of the overall situation. Only 6 out of 26 children in this age group could make themselves understood by using words - even as isolated symbols. This is the age group, however, in which a dramatic expansion of vocabulary more usually takes place. For children under two years, "not in verbal communication" has a somewhat different meaning. In these groups also, though, the absence of early verbal imitations and naming responses was noticeable in the majority of children.

How does the information relate to questions of cognitive progress?

It has two quite different implications for teaching. 1) A group learning situation is neither productive nor possible to control when verbal communication between teacher and child or child and his peers is very limited; 2) Language models usually provided by parents in one-to-one contacts with their children at home are so diluted in a group situation that it is not conducive to making up for lack of earlier learning.

In relation to cognitive development, however, it is not so much a matter that the acquisition and use of verbal symbols as such is proceeding only slowly and limits concurrent thinking. The real difficulty would appear to be the consequences of this - in that children lack tools for learning from others. They cannot draw on available sources of information in adults; nor can they interact with them in ways which stimulate and develop competence in thinking for oneself, in being aware of what one knows and does not know, in acquiring a vocabulary which helps to differentiate one's experience; and in communicating what is understood or not, in order to sort out conceptual difficulties or distinguish fantasy and fact.

For teaching, this means that one must not only deal with accelerating language acquisition. It is necessary to deal with the absence of any established motivation to communicate verbally, and the effects of this on learning behaviours and attitudes. This throws a very different light on the task for education than that conveyed by most theoretical discussions of language problems.

These recognize relationships, but often assume the direction of effect, and leave out any consideration of the functional meaning of language difficulties. Problems tend to be approached as technical rather than psychological; but technical skills are rarely acquired adequately in the absence of awareness of their value.

Whether or not language learning has some point for children is likely to be affected by two key issues : 1) awareness of some question, meaning, experience they wish to communicate; and 2) attitudes to the adults available as recipients of confidences or as resource persons.

Attitudes to teachers

Differences in the feelings which children express towards adults and their attitudes and expectations in adult-child interaction are of concern in education from several directions. From the point of view of social learning, their content is of concern in itself. In the context of this chapter, however, children's attitudes to adults - in this case, a new adult in a teaching role - warrant thought because of their effect on the process of education.

For a start, if children have learned to avoid or ignore adults, there is no way of helping them use the educational opportunities provided in a pre-school program until communication on a positive basis is established. This however, is only half the picture. It is known that children's behaviour towards adults exerts a strong influence on adult responses; adult effects on children now has a documented counterpart in the stimulus value of different children for adults and in the reinforcements for adult behaviour which children control. These are operative even for teachers who are conscious of the need to minimize these effects (Yarrow et al, 1971).

A summary of records made of children's initial attitudes to project teachers,as expressed in observable forms, shows again a range of differences within a part-Aboriginal sample, along with a higher frequency of some characteristics than might be expected for children from those families more usually in contact with pre-school centres.

The following cues (usually in combination) are seen as providing evidence over time of attitudes to an adult:

1) Voluntarily seeking, prolonging, or avoiding physical proximity in interaction situations (where instrumental dependence or independence, or adult control of immediate behaviour are not issues) or physical contact of a gentle nature. (eg. running out of house, smiling and waving, to meet teacher on arrival; sitting close to or relaxing against her; moving out of range in response to adult-initiated expressions of interest, affection).

2) Direct verbal statements of feeling (with appropriate accompanying facial expressions, tones of voice) - eg. "I hate you!"

3) Tones of voice, facial expressions of pleasure or hostility (eg. scowling, answering in pleasant voice).

4) Body posture, gestures expressive of feelings (eg. of fear - putting hands up to protect self against expected physical punishment while backing away, starting to cry on approach of adult; of embarrassment - avoiding eye contact, hanging head; of tension, anxiety - physical rigidity except for nervous hand movements in presence of adult).

5) The absence of any observable reaction to adult approaches; no change in behaviour or the maintenance of a glazed expression; no watching of adult which might express involvement, interest.

Obviously, there is some room for interpretation in the above sources of information; but the leeway here is a matter of agreement on the use of verbal symbols for observable events.

It is not a problem of making assumptions about internal states in the absence of any externalized cues. While it may be convenient for scientific reasons to describe the above purely as behavioural acts of interest in themselves rather than as indirect measures of affect or expectations, problems have arisen when this has been done in the context of concern with educational change. In attempts to rectify negative learning, behavioural (objective) measures may suddenly become behavioural objectives, and one finds effort focused on a dangerous manipulation of symptoms. Psychological meanings are lost; behaviours learned are no longer spontaneous expressions which provide evidence of the mediating variables which are the outcome of past experiences and the filters for new ones. Whatever the technical advantages, the science of human behaviour cannot afford to be less aware than the man in the street that the same behavioural acts may be accompanied by very different feelings in different people, or in one person over time. A change in the stimulus situation may require a response to be re-defined if questions of validity are to be dealt with. The distinction is made here, then, between objective (observable) evidence and behavioural acts. When behaviour itself is the focus of teaching, this problem does not arise. In the case of attitudes, however, one needs to look for relevant indicators of feelings and anticipations.

The code used to summarize children's attitudes to the teacher during initial teaching sessions appears below. It is not seen to describe a unitary dimension, but rather to cover the range and combinations of attitudes present across the group. Three major continuums were represented: love - hostility towards adult; confidence, trust - anxiety, fear in presence of adult; and interest - disinterest in adult. It should be noted that initial shyness (such as staying close to mother during the first session) was excluded from this set of data, as was the whole issue of attention - seeking and control - not necessarily expressive of basic attitudes.

Code

1) Positive attitudes expressed spontaneously.

2) A few signs of positive feelings; diffident but interested.

3) Adult presence accepted passively; interacted but remained non-expressive; contacts not initiated by child.

4) No overt response made to adult approach; expression non-communicative.

5) Showed anxiety, tension, embarrassment or discomfort in presence of adult.

6) Expressed negative feelings towards adult (hostility, physical aggression) or avoided, turned away from (without observable, practical reason).

As for all other codes, they are applicable to a single event and do not label children in any permanent sense. The frequency of similar events observed is less important than the relative emphases within events observed for any individual.

In only two cases of the total enrolment were active negative feelings towards teachers consistently expressed, without obvious provocation in the immediate situation. The general teaching problem in the area of attitudes to adults proved to be one less frequently met in the usual pre-school group.

Almost 60 per cent of the children enrolled had no difficulties with attitudes to adults which would be expected to interfere with learning. Almost 40 per cent, accepted the presence of adults at an unusually passive level. (This was in direct contrast to their attitudes to their physical environment and any play material provided.) Even when directly approached, there was often little change in expression or activity. Child-initiated expressions of interest in teachers' activities were few; in fact, imitative behaviour in the form of the dramatic play characteristic of many pre-school children was almost entirely absent. (This has been noted in other groups with culturally different backgrounds. Attempts to stimulate dramatic play, as though this were the learning issue rather than a means of measuring it, have been advocated.)

Only in a few cases was there evidence of anything as negative as psychological withdrawal. Instead, behaviour recorded in initial observations for this 40 per cent of children might best be described as an absence of "normal" social activity rather than the presence of other learning which could be described as "abnormal". There seemed, merely, a gap in experience which did not exist for many pre-school children.

At this point, however, there were many possible explanations. While these did not alter the fact that communication problems existed, they certainly had implications for rectifying this interference to learning. It was important to study the situation further. The most obvious possibility was that the unfamiliar teaching situation inhibited social responses previously acquired. On the other hand, some might suggest that this would not have been the result if the teacher had been Aboriginal. But one could not, on the evidence available, dismiss the situation quite so readily. One had initial impressions from direct, informal observations that the interactions of these children with adult members of their own families lacked some of the forms of contact characteristic of parental interaction with children in families growing up in different circumstances. And while the fact that the teacher was white might, for children of full-blood Aboriginal families, be a significant indicator of strangeness, some of these children had one non-Aboriginal parent and others themselves were not readily distinguishable from the general community in any physical way. Hesitation on the part of parents in early contact could well have had a counterpart in children, but there was no consistent relationship between the degree of readiness for interaction in parents and the type of behaviour in children represented by Codes 3 and 4.

The situation might best be described in terms of a vacuum, in which neither positive nor negative feelings existed, and in which there were few established expectations or rewards. Adults seemed not to carry previously-learned stimulus value as sources of recognition for efforts to learn; nor did they seem of interest to children as representing an adult world in which eventual participation was expected.

While ambivalent or inconsistent attitudes could have been expressed even within a short period, in this case quite clear-cut patterns emerged which differentiated individuals at very early ages. It is of interest to note that feelings and expectations which might be given very different meanings in a developmental context (eg. hostility v anxiety) may result in a common teaching problem. Communication between adult and child is reduced and perhaps difficult to develop. Of equal interest, however, is that since the origin of the problem differs, steps taken towards solving it may be very different for different children. The teacher's training and experience in recognizing the overt indicators of various aspects of children's emotional development is an exceedingly important element in modifying attitudes to adults, where these are less positive than is helpful to learning. On the other hand, she must avoid a situation in which the affective component of interaction (positive or negative) is so predominant that it hampers thought.

TABLE 12

Children's initial attitudes to adult in teaching role

Code	Part-Aboriginal				Non-Aboriginal
	Combined programs (N = 101)		Swan Hill (N = 57)	Metrop. (N = 44)	Metropolitan (N = 12)
All children 2 years and over (N = 64 + 4 N-A) *					
	N	% of age group	N	N	N
1	25	59.4	11	14	4
2	13		6	7	3
3	13	37.5	4	9	1
4	11		5	6	0
5	1	3.1	1	0	0
6	1		1	0	0
All children under 2 years (N = 37 + 4 N-A) *					
	N	% of age group	N	N	N
1	11	48.7	11	0	0
2	7		4	3	3
3	11	48.7	9	2	1
4	7		4	3	0
5	0		0	0	0
6	0	2.6	0	0	0
X	1		1	0	0

* N-A = non-Aboriginal

Such a situation appears in no way representative of Aboriginal culture; nor is it dependent on more advanced verbal communication than these children had acquired;signs of observational learning were also absent. Rather, adults and children in the families concerned seemed to live in somewhat different worlds once physical skills allowed a child sufficient mobility for autonomous action. Limited language skills were obviously relevant, but possibly an outcome of attitudes and expectations rather than a cause.

A considerable proportion of children, therefore, were found to act towards adults in ways which indicated that adults were perceived as filling the usual roles of providers of comfort, protection, physical nourishment and a degree of control. But they were not seen by this group of children as people with whom one shared thoughts and experience, whose activities were of interest, and whose presence was an opportunity for communication - at least on the basis of the evidence available.

Again, only a proportion of children needed certain teaching help here. But for those who did, of necessity it constituted an urgent priority in a pre-school education program.

Conclusion

As indicated at the outset, the main point of this chapter had been to expand the decriptive picture of two groups of Aboriginal children, begun by reporting group results on initial psychological tests. The data in this form are relevant to current discussions of characteristics ascribed in general to children from circumstances limited in their social advantages, and to generalizations made about Aboriginal children, as a result of research and experimental pre-school programs.

Some of the positive conditions known to help with certain aspects of learning, and the ways found in this project to create such conditions, will be noted in later sections dealing with the development of teaching programs. It is obvious here, however, that some more concentrated and consistent experience of specific forms of adult-child interaction than can occur in a regular pre-school group is needed to establish what other children may learn in one-to-one interaction with parents in the home.

It should not be thought, however, that the task for teaching purposes is to identify a few characteristics present in some significant proportion of children or families, seek some common interpretation for these and plan a program accordingly. The task for pre-school education is not of such a nature. Rather the teacher needs to know that the general organization of her program will allow her to offer the range of teaching help which may be needed with a group; she needs to be aware of possible reasons for existing problems and how to go about finding out which are operative in individual cases. Then she needs to understand not only how to reduce negative influences but how to create positive ones in practical forms acceptable to children with differing interests, physical skills and social experience.

That not all general characteristics reported in this chapter indicate negatives for education should also be noted.

For example, the delight which many children showed with simple play materials was refreshing after the restless search of children elsewhere for something new to play with and the constant efforts of pre-school centre staffs to "keep children interested". "We've had that before!" is a quite familiar comment from pre-school children who have learned to expect that others should make life interesting for them.

Swan Hill
program

Courtesy: Ministry of Aboriginal Affairs

SECTION V: TEACHING PROGRAMS AND FIELD WORK PROBLEMS

Chapter 13 THE GENERAL NATURE OF TEACHING PROGRAMS

As noted earlier, the practical organization of teaching programs and the teaching activities undertaken vary, at any one time, to accommodate differences between the families and children enrolled; and they vary over time in response to changes in parents and children, and changes in available resources. It is possible, however, to describe the range of activities operative over the period of work reported and some of their characteristics.

The procedure of reporting some standard program of activities for all families and for all children (as in action research studies) is precluded when taking an individual approach to determining teaching priorities, as in this program. For it then follows that the relevant learning conditions, and the activities into which these can be built, will also vary. Even when working on the same learning issue across a group, one must create learning situations which will interest the particular children involved, build on to previous learning, and suit their level of physical maturation. To describe carefully and illustrate, in one report, such a range of teaching questions as exists in one pre-school program is an impossibilty.

If it is possible to continue to make some contribution from the University to work in this field, we hope to take up specific teaching questions for study and illustration in following reports. At present, on the teaching end, this report concentrates on establishing a general framework for discussing an education program which allows both an individual approach and the application of research findings to teaching problems. The following description of varying ways of organizing work illustrates this approach, at the general level of administrative decisions concerning the nature of useful activity with particular families.

Some general information on enrolments is also included in this chapter.

13.1 Information on enrolments: 1969-1972

"Enrolment" has not been a matter of signing a form, which commits parents to specified responsibilities in advance. It has meant the point in informal contacts at which parent and teacher arrive at some mutual understanding that they have some common concerns; and that regular interaction could be helpful to the children and a source of support to parents; and also when it is understood that participation in the pre-school program is not a matter of meeting requirements imposed (however nicely) by non-Aborigines. A particular effort was made to make practical arrangements for teaching visits which would not just be an additional source of stress to families, already finding difficulty in managing their practical responsibilities.

In both programs, a number of parents with whom the teacher developed personal contact sought regular interaction before current teaching loads allowed enrolment. At Swan Hill, where the Aboriginal population is more concentrated, interaction between families [illegible] frequent, and the number of young children in one family often relatively large, this "waiting list" of interested parents who are wanting to give their children time and help is steadily growing, well beyond the needs which can be met by one teacher. Creating awareness and motivating increased educational interest in parents obviously needs to be followed immediately by temporarily increased teaching and other preventive resources. Unless these are available, increased awareness of possibilities and existing problems by parents and teachers becomes a source of additional stress all round. It should be noted that the ratio of children to teachers usually required for payment of subsidy in regular pre-school centres provides no realistic basis for assessing resources needed for work with Aboriginal families at this point in time. Not only does the pre-school teacher need to be carrying responsibility for helping parents as well as children with their education, but the multiple problems in most families and the political climate for work make extreme demands on time and energy.

TABLE 13

TOTAL NUMBER OF FAMILIES AND CHILDREN ENROLLED SINCE PROGRAMS BEGAN

Swan Hill	(1969 - 1972)	28 families	67 children (part-Aboriginal)
Metropolitan	(1970 - 1972)	28 families	53 children (part-Aboriginal)
Metropolitan	(1970 - 1972)	7 families	11 children (non-Aboriginal)

TABLE 14

ETHNIC COMPOSITION OF FAMILIES ENROLLED

	Swan Hill	Metrop.	Total
Both parents part-Aboriginal	11	10	21
One parent part-Aboriginal, one non-Aboriginal	6	15	21
One Aboriginal parent (mother) managing family	11	3	14
	28	28	56

TABLE 15

YEARLY ENROLMENTS OF ABORIGINAL FAMILIES IN VAN LEER PRE-SCHOOL PROGRAMS

Year	Swan Hill	Metropolitan*	Total
FAMILIES			
1969	19	-	19
1970	24	16	40
1971	19	17	36
1972	18	13	31

* Additional non-Aboriginal families - 1970: 3; 1971: 4; 1972: 4

Year	Swan Hill	Metropolitan*	Total
CHILDREN			
1969	34	-	34
1970	40	29	69
1971	32	25	57
1972	34	22	56

* Additional non-Aboriginal children - 1970: 4; 1971: 7; 1972: 6

TABLE 16

AGE OF CHILDREN WHEN TEACHING SESSIONS STARTED, AND DURATION OF CONTACT*

(1969 - 1972 enrolments)

Age group at first session	Number enrolled	Duration of contact (months)				Still enrolled
		6 or under	7-12	13-24	over 24	
SWAN HILL						
5 yr. olds	1	1	0	0	0	0
4 yr. olds	10	4	5	1	0	0
3 yr. olds	11	3	5	2	1	0
2 yr. olds	11	0	1	3	4	3
1 yr. olds	19	0	1	0	9	9
Under 1 year	15	0	3	0	2	10
TOTAL	67	8	15	6	16	22
METROPOLITAN (part-Aboriginal)						
5 yr. olds	1	0	1	0	0	0
4 yr. olds	14	3	11	0	0	0
3 yr. olds	15	3	4	7	0	1
2 yr. olds	12	1	1	4	3	3
1 yr. olds	4	1	0	1	0	2
Under 1 year	7	2	0	1	0	4
TOTAL	53	10	17	13	3	10
METROPOLITAN (non-Aboriginal)						
5 yr. olds	0	0	0	0	0	0
4 yr. olds	2	1	1	0	0	0
3 yr. olds	5	0	1	3	0	1
2 yr. olds	1	0	0	1	0	0
1 yr. olds	3	0	0	1	0	1
Under 1 yr.	0	0	0	0	1	0
TOTAL	11	1	2	5	1	2

* Includes term and Christmas holidays where applicable.

TABLE 17

REASONS FOR TERMINATING CONTACT WITH PROGRAM:

(1969 - 1972 enrolments)

Reasons for leaving	Swan Hill	Metropolitan		Total
		A	N-A	
Started school	17	23	5	45
Started regular kindergarten *	19	5	1	25
Moved from area (before school age)	4	14	3	21
Handicapped; other arrangements made	1	1	0	2
Deceased	2	0	0	2
Parent interest not sustained	1	0	0	1
Still enrolled	23	10	2	35
Total enrolment	67	53	11	131

* Supportive contact maintained when attending kindergarten in program area.

TABLE 18

PROPORTION OF PLANNED TEACHING SESSIONS ATTENDED *

Proportion of sessions attended	Swan Hill	Metropolitan		Total
		A	N-A	
100 per cent	1	11	0	12
90 - 99 per cent	7	20	7	34
80 - 89 per cent	7	11	4	22
70 - 79 per cent	19	7	0	26
60 - 69 per cent	19	2	0	21
50 - 59 per cent	6	2	0	8
Less than 50 per cent	8	0	0	8

* This information indicates the feasibility of planned teaching sessions and extent of exposure to these, not the extent of parental interest or effort to ensure attendance.

In this program, "attendance" has a somewhat different meaning than that of presence in a pre-school centre outside the home. While this was the case for some children, the more general meaning for our programs was the keeping of appointments with a teacher, for planned sessions, usually in the home. (An exception to this was the first year at Swan Hill, when a family-type group was in action.)

In the early stages of making contact with Aboriginal families, the need for time to establish positive communication is recognized. This has already been described. During this period, the keeping of appointments tended to be somewhat erratic. Fairly steadily in most families, however, absences due to failure to give preference at times to children's needs, or to just being unaccustomed to keeping regular appointments, dropped to a minimum, except where other major problems were also involved. The children's own increasing enjoyment of interaction with teachers and materials offered, and their anticipation of the teacher's next visit, appeared to exert a considerable influence on a mother's efforts to have children available and ready for teaching sessions, and a room prepared at home for use. Awareness of their children's satisfaction - regardless of any progress - was a major positive influence; home visit sessions and family groups gave mothers and sometimes fathers the opportunity to observe this.

This opportunity to observe was considered a very necessary source of reassurance to Aboriginal mothers, many of whom had most unhappy and unfruitful experiences in their own "education", and some of whom had every reason to distrust non-Aborigines. It was stated by some, quite directly that, "if the children hadn't enjoyed it, I wouldn't have bothered."

Within periods of contact with the pre-school program there have been many opportunities for parent-teacher co-operation on behalf of children.

There have however, also been multiple problems in a considerable proportion of families in both programs which have disrupted contact seriously, making pre-school children inaccessible to any planned teaching help for considerable periods of time. To see these breaks in contact with teachers as "attendance problems" or indications of parental interest in pre-school education, is most inappropriate.

Early in this report, it was stated that enquiries were made before initiating pre-school education programs, about the nature of supportive services available to Aboriginal families. It was recognized that the introduction of pre-school programs might well be inappropriate and ineffective unless families had arrived at some position of stability in meeting basic needs. For many families, still, however, stress well beyond what most people can handle independently is either chronic or recurrent, and no marked improvement in certain kinds of problems has been observable over the four years of the project.

Illustrations of the nature of these problems, possible reasons for their persistence, and comments on the position in which they place a pre-school teacher, are included in the notes on field work in the next chapter.

13.2 Range of teaching activities operative: 1969 - 1972

Once parents decided they wished to be in regular contact with a pre-school teacher, decisions on activities undertaken were made with each family on the following bases:

1) the aspects of learning in the children enrolled which need attention next, in order to extend development *

2) what is known about the conditions which help children accomplish the kinds of learning to be given priority

(These first two criteria for decision-making are seen as the teacher's responsibility.)

3) the extent to which parents are already providing, or having difficulty in providing, those conditions at home, and the possibilities of modifying these where necessary.

4) parents' feelings and thoughts about what they themselves can do to help their children educationally, at this point

5) the degree of interaction - current and preferred - with non-Aboriginal and other Aboriginal families

6) the arrangements for teacher-child and parent-teacher interaction which mutually accommodate parents' preferences and teaching concerns

7) children's previous learning, current interests and physical maturation and health

8) the immediate circumstances of families

9) program facilities and resources

* It has been our concern that parents have the freedom to say what they think Aboriginal children should be learning, and to be involved in decisions about how to help them do this. At this point in time, however, few parents have posed this question to themselves. Some seemed to have been presented with ideas that better education means "not dropping out of school","getting better jobs", or "attending a pre-school group". Planned teaching, however, requires conscious decisions about what is to be learned. Consequently, it has been necessary to carry more major responsibility for the educational content of programs than we would prefer. (This is not so different than the position at present in the general community but it has a different significance for Aborigines.)
In two ways, however, we are working for changes here:

a. mothers - and any fathers home during the day - are able to observe what the children are doing in home teaching sessions, and to talk with the teacher from time to time about what these activities are intended to help children learn;

b. initial informal discussion with a few Aboriginal leaders has confirmed our concern to help children develop the ability for independent action - to think for themselves, to gain confidence, and to progress with basic learning skills and general knowledge. All parents have also expressed the wish that their children have the experience of social contact with non-Aboriginal as well as with Aboriginal children.

On the above bases, the following range of activities has developed .

Teaching sessions in children's homes

These form the nucleus of both programs at present. From the viewpoint of children's progress, they provide opportunities for some of the more intensive teacher-child interaction needed to accelerate symbolic activity, and thinking and communication skills; also ability to interact with an adult on a teaching-learning basis.

Where the lacks in children's home experience are certain forms of one-to-one interaction with parents, their needs cannot easily be met in a group situation, geared to the use of skills learned from early interaction with adults in a group learning situation with peers. For such a situation to be of value, it is necessary that certain forms of self-control, communication, and learning behaviours have previously been acquired. When this is not the case, most pre-school teachers will admit the difficulty of giving sufficient help with these in a pre-school group of the size presently subsidized.

Home visit sessions have the added advantage of allowing teachers the opportunity to discover levels of progress in aspects of learning not readily observed. Contact with children who may have limited social experience is also easier to establish. Younger children's progress can be observed informally, and some teaching help offered before the age when attendance in a pre-school group is appropriate in terms of social control and emotional maturity.

As a starting point for educational contact, home visit sessions have been found to meet many children's immediate needs, while preserving some values important to Aborigines and being a practical possibility for many families. They also allow parents to build perceptions of "pre-school education" which are oriented to its educational content, and to see first-hand what it means to their own children, for their present as well as their future lives.

As an observing and a modeling situation for either children or parents, home teaching sessions allow a sufficiently salient adult model for effective results. There are less competing stimuli. Some mothers have made direct comments which indicate awareness of how the teacher talked to the children, asked them questions or gave correct words for objects; this has been followed by efforts to do likewise. Teachers have also observed signs of observational learning - such as a mother adopting some of the teacher's techniques of protecting the constructive activity of an older child from destruction by a younger brother. Awareness that this might matter, and why, indicated change in the adult concerned.

Experience in this project indicates that "talking about" is much less effective with the families enrolled than demonstrating what helps children learn. In the first case, knowing all the "right" answers can well be accompanied by doing all the "wrong" things. Further, the limited education of some parents makes it difficult for them to generalize from one situation to another, so that seeing a teacher in action in a pre-school group with other children does not provide sufficient clues for transferring observational learning to home events. If behaviour and conditions at home are to change in ways which give more support to children's development, the majority of parents seem to need to see someone else operating in the same set of practical circumstances with which they are trying to cope. To recognize these problems for parents, as well as an initial one of even sustaining verbal interaction with some continuous theme, is merely to face up to the very real consequences of limited educational experience. (This problem of generalization, however, is not a rare phenomenon. Teachers are known to express difficulty in seeing the relevance of teaching programs observed in one centre, to the practical circumstances of their own kindergartens or classrooms.)

Organization of teaching sessions in homes

Teaching sessions in children's homes usually last for one hour; they may involve just one child; two or three in the same family; or a similar-aged child from a neighbouring family where the parents know each other and agree to this arrangement between them. Sessions may be shortened for younger children or when some practical crisis in the home arises. It is understood that the mother (or substitute relative) is at home during the teacher's visit and invited (though not required) to attend the session. Most spend at least part of the hour watching or participating. To require a mother to be in the same room always, however, removes the opportunity to develop and observe her voluntary interest; is unlikely to facilitate teacher-parent communication; removes opportunities to encourage some degree of children's independence; is a practical impossibility for the mother at times; gives older pre-school children little chance to be away from younger siblings (since one would not want to discourage the mother's supervision of them); and makes it more difficult to establish new patterns of interaction or behaviour where some redirection is needed for progress in adult-child relationships.

It will be noted that the emphasis is on planned teaching sessions for children and informal learning opportunities for parents. In some cases, this emphasis is the result of awareness that parents are having such problems in dealing with the practical management and security of the family that, until this is under control, assistance is needed with the children's education. In others, however, there has been a need for time to think through - on the basis of some first-hand experience - what approach one can usefully take to strengthening conditions needed at home for progress in pre-school children. As stated at other points in the report, the question of "parent involvement" is considered to need much thought and clarification, as it relates to special programs of pre-school education, and to education in general. This topic will be the focus, it is hoped, of further study and reporting.

Both teachers work from station wagons (which are without official identification, in order to keep them as unobtrusive as possible). They visit families once or twice weekly, carrying responsibility for regular interaction with all known Aboriginal families with young children in program areas. At times at Swan Hill, this number has exceeded a possible teaching load, and the compromise has been to sustain much more limited contact with some families. The daily total of teaching sessions which can be carried varies with the demands of each family setting, the number of children to be planned for, and the location of the families involved. About four teaching sessions plus a variety of other contacts with pre-school centres, social agencies, hospitals, for example, where others are also in contact with the families enrolled, might make up an average working day.

It has been found that the teacher's need to adjust quickly from one family situation and set of circumstances to another, sufficiently quickly to create a profitable teaching-learning experience, becomes a source of stress if more than three or four actual family teaching sessions are attempted in one day. It has not been found necessary, however, to arrange daily contact for children in order to sustain their educational progress. The more concentrated use of resources for shorter periods at regular intervals has been found to be a more effective use of teaching time than trying to spread this, at the same time, over more parents and children in a large group setting. In comparison to the teacher-child ratio in a regular pre-school centre, a possible teaching load would approximate one teacher to 25 - 30 children, and up to about 20 families.

Equipment used includes some of the more portable materials usually found in pre-school centres. Children help to load and unload the selection prepared by the teacher. A choice of activities is available. It has not been found necessary to accumulate the large supply of equipment made necessary by putting a sizeable group of young children together in the same setting. The real world in and around the home, and the human resources the teachers themselves represent, are by far the most important ingredients of the educational interaction situations created. Improvised, and very simple, materials are often all that is necessary, when maintaining the control and interest of a large group of pre-school children is not an issue.

In home teaching sessions, teachers take much care to keep within the limits of the arrangement made with parents. If offered the use of the front room (usually the setting for work) they do not assume any freedom of access to other areas of the home. At times, until sufficient understanding is established, it is necessary to work under conditions which make learning and teaching more difficult - rooms without adequate light, TV switched on, or interruptions from children home from school and other adults coming in and out. Gradually, however, awareness of such factors in children's learning has increased, and some parents have taken the initiative in reducing distractions; others have responded positively to a question as to how things could be arranged so that these would not make it harder for their children to learn. There are families, however, where this procedure is not realistic, and another setting for teaching must be found.

Individual teaching sessions outside the home

In some cases, a combination of practical and psychological conditions at home precludes (at least temporarily) the possibility of home teaching sessions involving parents. But where parents are still concerned to maintain contact with a pre-school teacher and provide some additional opportunities for their children, by mutual agreement, the teacher may take out one or two children for sessions outside the home.

They may go for a walk, with the object of really "seeing" things in their environment which are passed every day without examination. They may visit the local park to encourage underdeveloped physical skills, or for some quiet space to talk and listen, or just to "be" - away from a home which may include 8 or 9 adults and even more children; or they may go shopping with some number concepts and some fun in mind.

The activities engaged in may sound little different than those planned in regular pre-school centres or those occuring in more privileged homes. This, however, could appear misleading, since the nature of teaching contact with children during these activities differs in some marked respects. It is likely to be more highly concentrated; more directed at specific aspects of learning; more concerned with some earlier levels of progress than those needing attention in children ready for a group learning situation; more continuous than can be provided by a teacher with 30 children on her mind at once; and more concerned with progress in areas not so easily open to observation in a relatively unstructured play situation.

For children needing help with verbal symbols and verbal expression, project cars have helped create conditions conducive to learning. Impulsive physical activity is naturally restricted - and many of the children had already learned to accept this necessity while riding in cars; close physical proximity between adult and child allows a very salient language model; and there is a motivating feeling of shared excitement and pleasure at a passing parade of new or familiar things of interest. Repeated trips on the same route allow consistent labelling of objects and landmarks. These and the maintaining of a running commentary on immediate, shared experience, have eventually been rewarded by a burst of clearly modelled phrases and spontaneous recall of earlier experiences. Further trips allow consolidation, and a chance to recognize and enjoy learning achieved.

(It is hoped that this illustration will lead to increased thought for the possible range of situations in which known conditions, conducive to learning from an adult model, might be created - not to a sudden increase in car sales!)

The same conditions can be created in various ways. Story-telling has similar components, but the real world provides both a more vivid stimulus, and a more valid reason for learning.

Small group activities

For those children ready to learn in a peer group situation, and needing the stimulus and independence of some experiences difficult to set up in homes, small groups of from four to six or seven children have been organized once or twice weekly from time to time. A small playroom was available in the Ministry of Aboriginal Affairs building at Swan Hill until this year. This could be prepared in advance for teaching sessions. Similar facilities have been needed for some of the older children in the Metropolitan program, but we have not yet solved the problem of a physical headquarters for the teacher in that area. Since children currently enrolled comprise a younger group again, this need is not so pressing, except for the teacher's own need for a recognized physical base where she may be contacted and seen to exist in some reality by other professional colleagues.

Previous groups, however, have been observed to lack levels of social awareness, confidence or self-control which are necessary pre-requisites to successful participation in the larger and more complex social learning situations at pre-school centres or schools.

This illustrates the need to have a range of resources available. One of these can be a regular pre-school centre. As an initial teaching situation, however, a peer group setting is not the immediate need, either for the children's own progress or the teacher's understanding of previous learning. That it would have been useful later in the program for some children not only indicates a change in average age of those enrolled, but a far greater change in ability to use the opportunities for learning available in such a situation.

Excursions with parents and children

Home teaching sessions have sometimes been replaced by excursions into the community. Parents are invited and encouraged to take a major role in such events. These have not only served to draw attention to children's need to experience first-hand how their immediate environment operates. They have helped to sensitize parents to what does interest children, what there is to talk about with them, and under what conditions this is enjoyable all round.

Again, successful communication with parents concerning children's development is very much helped by a shared experience providing opportunities for observational learning, and followed by some reflecting on children's reactions and ways in which learning might have been furthered.

The spontaneity of such situations is, however, an important element. Advance attempts to stress their teaching function too specifically produce self-consciousness in parents, and do not encourage efforts to participate. Perhaps one of the most valuable aspects of these informal excursions into the community - even a short trip to contact a pre-school centre or hospital - is simply the experience of personal contact with a white adult, on the basis of equality and mutual respect. For some of the parents, this has been a novel experience.

Family-type pre-school groups

As a way of establishing initial social contact with families in an Aboriginal community characterized by some existing group activity, the informal family-style pre-school group offered certain advantages. Most of these were discussed in reporting initial field work. As a setting for furthering other than social learning, however, it proved quite inadequate. This was true for work with either children or parents. Reorganization of early activities at Swan Hill was necessary, in order to build educational elements on to the social communication established.

Children's levels of progress (even at a similar age) were far too diverse to meet in one kind of situation. For instance, for children who lacked progress with attentional skills, competing stimuli were far too great in a mixed-age, family group, and the behaviour of younger children provided an inadequate model for the older ones. This was particularly difficult in the absence of some of the usual parental expectations for self-direction towards purposeful ends.

Children able to sustain goal-oriented activity tended to be interrupted by a majority operating at a largely sensory level. Opportunities available for using materials to express ideas or experiences were of use only to the minority who had had enough help in digesting, symbolizing, and reflecting on their experience to have readily available ideas to express. Sometimes patterns of parent-child communication had built up expectations of adults not conducive to progress; the presence of parents then tended to trigger off automatic responses in children which generalized to teachers at first; this made it extremely difficult to reverse directions in children's learning which were negative in their effects.

The possibility was remote, in this situation, of providing sufficiently sustained sequences of teacher-child interaction to help children build up learning behaviours and cognitive skills; this was particularly so when it was also important to be aware of parents' social experience during pre-school sessions, and to emphasize children's accomplishments rather than their problems.

As a situation for helping parents learn, this group setting also presented problems. With the presence of friends, the general activity of the group, and physical responsibility for the safety and comfort of young babies, the possibility of observational learning by parents was often poor. Further, one could not discuss children with parents in their presence. However, organized group discussion with parents for part of the session put some in a social situation they found difficult for free communication; any issue selected for group discussion appeared far too remote from the immediate practical problems on individual parents' minds. It seemed clear that useful educational work with parents must begin in individual contact situations. Because of this, and because of strong differences in whether a parent wished to identify with an Aboriginal community group, it was decided that any group activity with parents should evolve from their own interests and ideas, and should not be something created by others into which they should be encouraged to fit. Since initial suggestions put forward by parents were geared to money-raising rather than to learning, it was decided to delay any organized group work until the idea of an educational program became clearer.

It proved necessary, then, to approach work with both children and parents at a very individual level, and to maintain a direct and equally personal relationship with each family.

Co-operative work with local pre-school centres

Project teachers have supported parents' initial contacts with regular pre-school centres. When given the necessary information, a proportion of parents who wanted their children to attend kindergarten have taken the initiative to enrol children themselves. This has usually occurred - and been appropriate - after a period of quite intensive teaching work with children.

For some children, individual teaching sessions have continued along with kindergarten attendance, and communication with the kindergarten teacher over children's progress has been established. However, much more work needs to be done here. This double effort indicates the differing possibilities of group and individual teaching situations, rather than some need for double effort in the form of tutorial help with the same aspects of learning.

In some cases, practical help with transport has been necessary; parents and project teachers have shared the overall task of getting children to and from the pre-school centre. When some families live out of town, have no car, and do have several children under school age, two trips out within three hours is a practical impossibility.

Since bursaries for pre-school attendance have been made available to Aboriginal parents, project teachers have tried to help parents to understand and to use these resources thoughtfully, rather than as just another handout. The work here should not be underestimated. When a parent does not know that a bursary cheque drawn on one bank can be paid into another, and spends some days preoccupied with this problem, it is a step towards independence when she finally decides to ask the pre-school teacher for the information needed to deal with the situation. Previously, action might not have been taken, since admitting the need for help in understanding things which one seemed expected to know was a source of embarrassment and involved loss of self-respect. Official policies tend to present an expectation of independent action, when the person concerned is not able - although willing - to meet this expectation.

Alternatively, policies may not allow recognition of what responsibility has been assumed. For example, parents interested in having children attend a local kindergarten in one area responded to the efforts of a project teacher to help them think through how much of pre-school attendance fees they might pay themselves, and how much bursary help they needed to pay the cost of an educational opportunity, which they now saw some point in. This in no way was comparable to an assessment of what they could pay, but represented what they wanted to contribute. Applications were made for the balance.

It was a considerable source of disappointment to this project that, for various reasons, State Government policies did not allow support or recognition of this progress in parental independence. Applications for differing amounts apparently could not be handled by a centralized system, and some parents consequently received money which they did not want. This, if anything, seemed to revert to handouts. What is needed is access to resources which can be drawn on to the extent necessary in individual situations. Until differential help is an acceptable concept, progress with responsibility-taking will be hindered by failure to adjust expectations to widely varying family circumstances and previous progress. Confidentiality in such matters - as in the general community - would seem appropriate.

Concerning the children's experience in regular pre-school centres, there is need for considerable additional work. Observations made of the behaviour of Aboriginal children in the pre-school centres with which the program has been in contact, and conversations with the teachers there, provide evidence that teachers are anxious for guidance and that the situation may not be educationally helpful, as a matter of course. The outcome is very much dependent on the child's previous progress, the emphases in the teacher's program, and the extent to which the aspects of learning of immediate importance are those which are helped by a peer-group situation.

Questions raised by experimental pre-school programs about "traditional" pre-school education have not shown that the existing concerns of such programs no longer matter. They have, however, drawn attention to aspects of learning and levels of progress not easily dealt with in a peer-group situation; also to the degree of selectivity in goals which operates at the level of action, in contrast to intent, in regular pre-school groups.

As a result, it is considered important that children whose early experience has lacked some of these basic educational ingredients are not enrolled in regular pre-school centres, with the idea that this will provide for their immediate needs. It may actually make certain kinds of cognitive progress more difficult for them. Initial observations have also shown that interaction with non-Aboriginal children does not necessarily occur.

There is much room for further study of the experience of Aboriginal (and other) children already in regular pre-school programs.* From work in this project, it is apparent that neither on cultural or educational grounds should the emphasis in pre-school education be put on increasing enrolments in the usual pre-school group. This can be helpful and appropriate. There are, however, far more urgent and suitable ways in which pre-school teachers might support the education of Aboriginal children. Whether or not these are possible is a matter for planning in a context wider than that of education.

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* Note Although initial observational records were made of children attending regular pre-school centres during this project, the data were considered insufficient to present in this report.

Educational work with parents in the use of community services for families

Aboriginal families have been found to have many problems in using community services which their children may urgently need. Help at official levels tends to be witheld, it appears, on the assumption that help once given continues to be expected, and increases rather than decreases dependence. In the experience of this project, however, this approach has been found to reduce requests for help, but not to reduce most of the problems at all. This cannot be equated with progress towards independence, or action in directions important for children's well-being.

For example: at official levels, it was thought that all pre-school children in one program had been immunized. The project teacher became aware, however, that this was not the case. In the course of conversation, it was found that getting children immunized was not something the parents concerned had ever experienced, and unlike most parents in the general community, they lacked friends or relatives near, who could help them know how to go about it. Some were inhibited by the strangeness of contact with people outside the Aboriginal community; some had difficulty thinking how to solve practical problems of getting to the right place at the right time; some were afraid of their children's reactions and uncertain that they could handle them in that public situation; some lacked information about the consequences for children of not being immunized.

In this situation, the teacher was careful not to take over the responsibility herself. Her contribution consisted of:

a. a definite statement that this was a matter of importance *for children's health*. (Previously, it had seemed more a matter of something they had been told they *should* do.)

b. the expectation of some action from parents

c. information about what was involved, and how children might react

d. an offer to go with the mothers concerned, both for personal support and to show them the procedure

e. encouragement and help in thinking out how they could organize this

f. suggesting a deadline for a decision (before the teacher's next visit)

g. an offer of practical help with transport

Taken separately, it might seem that parents could be expected to cope with these themselves. Together, however, they represented too many changes from established patterns of responding.

The outcome of some educational help: all children were immunized; parents enjoyed the trip and supported each other in a new contact with the wider community; and, more importantly, there was satisfaction at having dealt with this and a new-found confidence spontaneously-expressed in terms of, "Now we know what you do, we can get together and do it ourselves next time."

This is merely one illustration of a whole range of practical situations in which failure to use necessary community services is not a matter of motivation. The operation took teaching time, understanding based on an existing relationship with parents, and concern with the goal on the part of the teacher. For these parents it is not likely to need repeating. There are, however, many others who have not grown up in a community such as that in which they are now living. It is not easy, at the adult level, to fill in basic gaps in experience, when others appear unaware that they exist.

. . . .

An official letter comes, for instance, about some social welfare arrangements. A parent may only be semi-literate and have difficulty understanding what is said. Since she knows from its source that it relates to a personal matter, she may not wish to ask just anyone to read her the letter. In some cases, she is carrying parental responsibilities alone. By the time she finds appropriate help, she may have missed some deadline for responding. The choice then may be between making public one's illiteracy when one already feels inferior, or being judged unco-operative or disinterested. Often the solution is to remain silent.

. . . .

Or again, a parent makes an appointment with a specialist over some aspect of her child's progress, with encouragement and help from the teacher. The specialist recommends action which at that point is a practical impossibility in the current family circumstances. The problem of what to do then reverts to the teacher and mother, since both are still concerned for the child. The teacher asks why the mother did notexplain her problem to the specialist. "I tried to, but she wouldn't listen." It is particularly difficult for some Aboriginal parents to assert themselves verbally, and particularly so when faced with white personnel in roles which carry official status. Here is a parent making an attempt to deal with parental responsibilities. But there is, in this situation, no reinforcing outcome for the effort to master a new undertaking. The teacher can help to some extent to ensure that the experience does not discourage future efforts, and can help to interpret what has happened and what might be done about it. It is important that someone still presents the expectation that the original problem will be given attention by the parent.

. . . .

Some Aboriginal families have moved well beyond the point where parents face these kinds of problems. For others, they are not isolated incidents, but part of the fabric of their daily lives.

Follow-up work with schools

Working contacts have been established with a number of schools which children from this program are attending. To date, these have mainly centred on communication over efforts to deal with children's special needs - a health check, eyeglasses, speech therapy, for example. Schools have also co-operated in providing an assessment of progress in early primary grades. (See Chapter 16)

In most cases, there has been a readiness to communicate which should make the chance for children's progress more secure. Along with this, however, there has been an almost complete absence of resources for dealing with the nature of support needed. There is an 18 months wait for a school medical examination. Psychological services are limited to discussion with the teacher; the psychologist has no opportunity for direct contact with or study of the child in need of guidance. And when children's levels of progress do not match the school curriculum, the teacher may express inadequacy in knowing what action to take.

It was quite impossible, with the resources of this project, to assume the additional responsibility of action needed at the school level. But the situation is open to future effort. This should, however, not only be geared to Aboriginal children, but to the proportion of the general community in difficulty in early school years. The framework needed for any such effort should not be one of "remedial" help which labels a child with the weight of failure; but one of adjusting the focus from curriculum requirements to building on to children's existing progress.

Note on practical resources of this project

The activities described have been carried out with minimal resources. One station wagon was available for each program, and a temporary physical base for one. Each teacher has worked in considerable isolation, and under emergency conditions. After the initial three-year grant, there has been no assurance of continuity, and long-range planning has been impossible.

A full-scale pre-school centre is not, however, considered either essential or necessarily helpful in dealing with needs uncovered. The most expensive and necessary resources for teaching of this nature are those provided by experienced teachers, who can make their time readily available to assist individuals to new levels of independence.

Under present policies, unfortunately, capital funds for buildings are relatively easy to acquire. Money for any sustained provision of human resources is not. Since education is a matter of human communication, and not one of bricks and mortar, this situation has been problematical in developing field work.

Chapter 14 FIELD WORK PROBLEMS AND PRIORITIES

Exploratory activities described in the previous chapter uncovered wide differences between families of Aboriginal descent, in the degree to which circumstances allowed their taking a more active role in their children's education. The following notes from field work describe variations in the nature of teaching contact found possible. Some general analysis of the range of family circumstances met in our two programs, and an indication of how these relate to educational work and to the responsibilities of non-Aborigines, may help in thinking out future action.

It is the absence of significant and sustained positive change in the overall position of many families, throughout the period of contact, which seems to require greater attention to the nature of problems and some major reorganization of thinking and resources.

The complexity of interacting environmental factors and highly personal nature of adults' previous experience (and its consequences) have made it extremely difficult to plan field work in any organized framework. In fact, it has been hard to feel at all certain about the nature of action which could possibly be effective, once an attempt is made to consider several aspects of the problem, rather than only one.

This complexity has a parallel in preparing a report. Describing, separately, the incidence of particular family characteristics, educational levels, or environmental factors, does not expose the experience of people or set out the work needed sufficiently clearly to help with the planning and use of resources, or with the problems which teachers have faced. On the other hand, describing the range of situations met in individual families is a practical impossibility in such a report, and leaves one without some framework for working for positive change.

Gradually, however, it has become apparent that two or three variables in combination provide clues to priorities in a sequence of supportive action. A pre-school education program, as this is usually conceived, is not often a first priority - not because some Aboriginal children (like white children in similar circumstances) are not urgently in need of educational help, but because it is often almost a practical impossibility; also because any positive effects on children are not sustained by the informal sources of learning operating in family, community, and formal education system.

Educational activity, however, does appear to have a highly significant role in relation to the family problems which have become evident during teaching contacts. But what "education" means in the sequence of work needed, what its role is in relation to other areas of effort, who can best further it, and whose education is in question - Aboriginal or white; adults' or children's - needs spelling out with some exactness. When this is done, the potential contributions of pre-school teachers and others to a constructive plan of work can be considered.

In this chapter, factors affecting teaching possibilities are discussed. The nature of educational work needed, and some tentative guidelines for action, are included in Chapters 17-18. For further notes on field work, see the supplement, Appendix B, pp. 267-274.

14.1 Family circumstances and education programs

It is a practical necessity to organize work according to the immediate circumstances of families. In many Aboriginal families, however, these change in major ways which disrupt the activities of all concerned, and require continuing and time-consuming re-organization of teaching schedules. Only by responding in a flexible manner to changes occurring in families has it been at all possible to sustain some educational work.

Generally speaking, the differences between families participating in this project, which most affect the development of work, fall into the following groups. The lines between these groups are not at all hard and fast for any family over time; there has, however, been an identifiable emphasis during the main period of contact.

Group 1: Physically stable two-parent families (51% of 1969-1972 contacts)

In this group, there is a continuing relationship between a father and mother who are sharing basic family responsibilities. Such continuity has been observable over a period of contact with this project, and known to have existed previously. The partnership is not necessarily endorsed by formal marriage, but in most cases, this has occurred. These families have some permanence of housing which meets their basic physical needs; for some, however, there is still a degree of mobility related to the father's employment. (This appears closer, however, to similar activity in the general community.)

Within this group of physically more stable families, there are wide differences in functioning. These affect the educational work which can or should be done if possible.

Differences between physically stable, two-parent families, affecting the nature of teaching possible

Group 1a: (40% of total enrolments)

Accessible to sustained contact: sufficiently well-established and free from excessive problems to allow opportunity for thought about children's development and own cultural position; educational background makes this possible though interest in doing so varies widely; practical and economic pressures set severe limits to time and freedom for adult participation in educational activities of a planned nature. Both parents may be engaged in a special effort to maintain or strengthen an economic and social position, arrived at relatively recently.

In these families, parents appear to have most daily responsibilities under control. There are intermittent problems - employment, health, personal, practical - but parents usually seem to initiate action to try to solve their own problems, and to maintain family functioning when difficulties arise.

These homes apparently provide children with "normal" levels of stimulation in adult-child and sibling interaction; most children here are making educational progress at or above average levels of learning, according to data obtained in this project and the expectations of project teachers. (There were a few exceptions to normal progress, but in these cases, the child himself had some obvious handicap which would be difficult to attribute to socio-cultural deprivation.)

As in the general community, there were wide variations in the contribution homes were making to children's experience and learning; in the presence or absence of child-rearing, health, practical and psychological problems.

In the following set of tables, which give a breakdown of the general characteristics of families, identified in this chapter, the ethnic identification of parents is indicated by A (part-Aboriginal) and W (white) for father and mother, respectively. For the group under discussion, frequencies are as follows:

		A/A	W/A	A/W
Swan Hill	N = 8	3	4	1
Metropolitan	N =14	4	7	3
Total	N =22	7	11	4

Group 1b: (11%)

Accessible to contact for periods in which most parents have some chance to think, particularly, about children's needs; at other times, individual reactions to periods of family pressure (e.g. depression, exhaustion, retreat from social interaction outside the family, hostility, increased practical effort, reorganization of parental roles, the seeking of contact with relatives) affect both teaching possibilities and parents' opportunities for taking advantage of an education program.

Large families, limited material resources and facilities, and limited educational backgrounds, all appear to contribute to the general management problems which parents in this group communicate, directly and indirectly. Some have not grown up in such homes and have no parental model to follow. Budgeting successfully is still problematical, in a number of cases; it is difficult to keep all the repercussions of decisions in mind. The responsibilities which come with re-housing can be a heavy load. With one thing and another, consistent awareness of children's experience or freedom to discuss this with a teacher, tend to be very limited.

In this group, children's progress is variable; some need more than the usual support in learning. In a few cases, there is little cognitive stimulation in the home setting and children have shown severe educational retardation, against expectations for non-Aborigines. The degree of emotional security which parents have been able to communicate to children also varies.

In the case of these families, it is difficult to make a constructive contribution from a planned education program. This is partly due to parents' educational difficulties (levels of literacy and communication skills) and partly due to the size and general disorganization of these households. Rarely have limits been set by disinterest in cooperation.

		A/A	W/A	A/W	?/A
Swan Hill	N = 3	3	0	0	0
Metropolitan	N = 3	0	1	1	1
Total (Group 1b)	N = 6	3	1	1	1

Group 2: Two-parent families without settled housing during contact period (4% only)

Not accessible to any sustained contact: only a few families known to this project were in this position, following the re-housing efforts which had occurred just prior to its initiation; these families are now in a settled position. At the time, however, they represented a significantly different situation, affecting any plans for action in support of family education. They were mobile, moving in and out of town, from the house of one or another relative, which was not designed to accommodate an extended family.

It was known that these parents were interested in participation in the pre-school program (through direct, passing contact, or through the comments of relatives). They were kept on a list "pending enrolment", and opportunities were used for maintaining some intermittent contact which might help sustain interest.

The point of particular concern here is that these were families of new parents and young children, and no preventive work was possible. In such cases, by the time contact is possible, there may be two or three pre-school children who have grown up in a constantly changing physical and social setting. While this in itself is not necessarily a negative factor, it can make learning and general progress difficult, if its meaning for children is not recognized and dealt with.

		A/A	W/A	A/W
Swan Hill	N = 2	2	0	0
Metropolitan	N = 0	0	0	0
Total	N = 2	2	0	0

Group 3: Intermittent marital stress or family separation (20%)

(as evident in parents' voluntary comments to teachers and observable events during home visits)

Sustained contact possible for periods of stability or temporary separation. When stress becomes intense, however, efforts to cope on the mother's part may lead to mobility and inaccessibility to any form of help from those in previous communication. She may return to her own parents' home in the country, hoping for emotional support; be afraid to stay in her own home for fear of physical assault, and seek safety with friends or relatives; temporarily send some of the children elsewhere; or in trying to preserve some family continuity, arrive at a state of physical exhaustion and psychological stress which appears to result in temporary withdrawal from contacts outside her immediate family.

When it is the mother who leaves home, the chances of maintaining contact are less likely than when the father is absent; in this case the father may need to send younger children away, in order to retain employment. The reverse of this problem shows itself in some relatively stable families, who are called on to house - often for indefinite periods - pre-school children from the families of relatives. Added to an already lively group of three or four pre-school children, living in limited space, this may also disrupt the educational efforts of families in the "stable" group, and subject households to responsibilities heavier than can be carried without cost.

In two cases, families in this group tending to be subject to marital stress have no fixed address, and are not yet accessible to anything but passing contacts. Children may be left with relatives for periods, making some intermittent activities with them possible in some cases.

When separation for economic reasons hangs in the balance, pressures negative to family survival may be created by official action. Unpaid rent can lead to suggestions from official officers that the solution to uncertain income for family needs is legal separation and a pension. This would seem a reversal of progress. Most certainly, it solves the problem of arrears in rents. But it deals with none of the real problems related to progress to a more independent position. Economic security for wife and children would seem to be offered at the price of family disintegration and withdrawal of personal concern and support, or even a physical home, for the husband.

In these families, there have, apparently, been efforts towards a more stable position. Pressures causing breakdown appear to arise out of parents' interpersonal relationships, but immediate economic and practical problems also exist, and may well contribute heavily to the situation.

Children's progress again shows a wide range of differences, from being well-advanced to being seriously in need of additional teaching help. In one or two cases, there are early indications of mental health being at risk.

		A/A	W/A	A/W
Swan Hill	N = 6	5	1	0
Metropolitan	N = 5	3	2	0
Total	N =11	8	3	0

The point at which most families in this group seem most vulnerable is that of the father's contribution. The Aboriginal men concerned seem to have reached a state of personal disintegration, sometimes amounting to mental illness, or a degree of inability to carry family responsibility which forces their partners into separation, largely for economic reasons. The apparent absence of personal support and concern for this group seems a serious gap in efforts to encourage positive home conditions. It has not been possible to establish much communication from the pre-school program, since men are needed for such contacts, partly in order to avoid putting further strain on relationships between husband and wife, already jeopardized by distrust.

While there are likely to be problems on the side of both parents, some mothers are making a quite intense effort to maintain some family stability in the face of such problems as periods of physical violence from the father or intermittent separation while gaol sentences for "drunk and disorderly" behaviour are served. Periods of desertion and mutual distrust concerning sexual relationships also contribute to the difficulties of this group, it seems from field contacts.

Some Aboriginal mothers have shown remarkable qualities of personal strength and understanding, maintaining home life for children at seemingly impossible odds, and with sensitivity to children's experience in relation to their own. Feelings for the father who may be unable to support the family, economically or personally, may not be rejecting or judgmental. There is understanding of some of the origins of the despair, hopelessness, and loss of feelings of manhood and cultural identity which are thought to contribute to current behaviour. A mother may try for many years to preserve those positive feelings which still exist in the partnership or in the father's relationship with his children. Beyond this, some express a depth of caring about their husband's needs in this situation, and hold off any permanent separation because of awareness that this withdraws his only source of personal support and understanding, comfort and affection. In other cases, there appear never to have been close emotional relationships, or a great deal of personal communication.

It has been possible to re-establish contact following breaks, in some cases. When this has occurred, teachers have observed differences in children's responses, on renewed interaction. Some appear to have retained their previous progress and not to have been unduly disturbed; some, however, have shown some signs of anxiety and withdrawal, or behaviour which could be symptomatic of this has been reported by mothers.

In families in this group, the teacher has needed to exercise care to retain an impartial position in respect to parental relationships, and yet to respond to urgent needs for someone to listen and to care; also to help interpret the unspoken expectations of the general community as to responsibilities its members are expected to assume. Whether or not a pre-school teacher is seen to be involved here in work which is outside her normal professional role, the situation arises automatically, since she appears to be the one person in regular, accepted contact, to whom a parents can turn for human support.

In a few cases, mothers in this group of families have managed to maintain very regular home visit sessions for children, in spite of major personal difficulties.

Group 4: Single parent families, most highly mobile, changing de facto partners (20%)

In this group, some families are physically accessible for periods of some months, usually during the mother's return to her parents' home.

Opportunities for interaction with these families is heavily dependent on the mother's attitude to her own position. In most cases, however, contact is disrupted by mobility occurring during the forming of a new relationship. In a few, the limited education of the mother (and possible genetic influences on this) make attempts at verbal communication, beyond cooperative social interaction, not only difficult but probably ineffective, in any outcome for children.

The numbers of single-parent families are being sustained by current additions from the under 20 age group. Mothers here vary greatly in characteristics; no one pattern of experience, readily observable, apparently leads to this situation. Once in it, however, it seems to be repetitive. A few single-parent families have a fixed address; most, however, make intermittent use of their parents' homes.

Swan Hill	N = 9	(Aboriginal only)
Metropolitan	N = 2	
Total	N =11	

The degree of involvement of single mothers with their children has varied widely. Children from an earlier relationship are not always accepted by the current partner, and the mother is forced to choose between him and her children. Under these circumstances, children have been divided up between relatives, or have become wards of State. In such cases, educational work done with them or with the family seems to bear little fruit, since the relationship with both children and parents is disrupted, and one must start again - even if they are still within any reach of contact.

In this group, too, there is no predictable pattern about children's cognitive progress, although there are no top levels of performance, and, in some cases, social behaviour and dependency relationships have shown various signs of disturbance and confusion, though this may be only temporary.

Note: The circumstances of three Metropolitan families (5%) were unknown. Teaching contact for short periods occurred while children from these families were living in other homes where the teacher was working.

14.2 Summary: variables affecting the possible contribution and organization of a planned pre-school education program

In practical terms, it is evident that a considerable proportion of Aboriginal families in programs to date in Victoria are not immediately in a position to involve themselves actively in a regular pre-school education program. Attendance figures in the previous chapter show, however, that most families are interested to do so during periods when family circumstances allow. The range of differences between families concentrated in any one area requires a highly individualized supportive program.

The key issues affecting participation are not - as might be thought -

cultural relationships or parental interest, motivation or effort on behalf of children; these are open to influence and change within a pre-school program, if necessary. Instead, the basic factors which emerge in this project are:

1) sufficient family stability to make families accessible to some sustained contact with a source of educational encouragement and help:

2) sufficient freedom from multiple problems of family survival:

   a. to allow parents time, energy, and psychological freedom to be open to thought and communication in relation to children's progress, and their own cultural position

   b. to allow opportunity for any increased awareness of these to result in the taking of action, rather than the experiencing of just one more source of stress

Group 1a families (40% of total enrolments for combined programs) are mainly those in which these two prerequisites exist. They are more comparable to families in the general community who - while coping with intermittent, and often quite severe employment, financial, and personal problems - are in a position to take some action within the home, as a result of awareness of their children's experience, interests and needs.

In these families, children show no signs of severe educational retardation, although this may mean that parents have learned to manage family problems in ways which avoid a situation of cognitive deprivation for children, rather than that their problems are any less. Here, a pre-school program can play its more usual role in supporting and extending (rather than replacing) the family's contribution to children's general development and education.

Even in this group, however, it should be recognized that the achievement of such a position of relative stability and independence was quite recent for most of these families. Sustaining it still required a good deal of effort. What was needed appeared to be time for consolidation, rather than any new set of demands on parental energies and thought.

14.3 Conflicting priorities and teaching responsibilities

As stated in the working notes on pre-school education in an earlier chapter, the first responsibility accepted by teachers in a regular pre-school program is that of helping to ensure a basic set of conditions which make learning at a cognitive level possible for individuals. Some of these relate to the learning environment, some to states within the person which make such learning possible.

In the usual teaching situation, the teacher finds a few children who cannot make educational progress because one or another of these sets of conditions is missing. She then has the responsibility of introducing compensatory elements into the kindergarten environment which is under her control; also, through contact with parents and referral procedures, she tries to reduce the influence of factors adversely affecting a child's chances for progress. The combination of those external and internal conditions necessary for learning may then possibly be achieved.

In field work in this project, however, teachers were faced with the task of teaching children, most of whom lacked several of these pre-conditions for optimal development and cognitive progress. Added to this, as reported earlier, sustained contact which might have allowed compensatory efforts within a pre-school program was a practical impossibility in many cases. Conditions in which many parents were living were so adverse that they could not possibly create a home setting which could stimulate and sustain educational development in children. (These adverse conditions were by no means all physical.) At the same time, these same conditions created problems for parents' own educational and personal development.

The teacher's normal responsibilities for maintaining and consolidating conditions conducive to learning were, as a consequence, in this project often excessive. The initial step towards any lasting positive change was that of helping to ensure that parents had appropriate help in seeing how to deal with the problems they themselves were facing, and also the necessary resources. Once conditions had been created which allowed them to gain more control over their everyday lives, and some degree of success had been experienced with this, attention could be given to what children needed from parents at home.

Normally, the teacher is able to play a coordinating role here, to mediate between parents and specialized community services, cooperating in an interdisciplinary framework. Thus she is in a position to help parents initiate contact with supportive services, at a time when these can play a preventive role for children and are seen to be needed by parents. But the administration and nature of help available and the range and degree of problems met have made it impossible for teachers to play this cooperative role, while maintaining work with children towards educational goals.

Assistance available specifically for Aborigines was administered largely in terms of blanket policies rather than individual situations; it was centralized rather than local and so less readily available than needed; and it was activated by remedial rather than preventive concerns. This meant that problems recurred and, in trying to discourage dependent behaviour and handouts, help was increasingly withheld without parents' problems being solved. Families were thrown back on their own resources or referred to regular community services. Since the framework for administration of funds allocated for work with Aborigines was not an interdisciplinary one, the teacher was not in a position to influence the nature or timing of help, or to gain support for her own preventive efforts. Resources for creating conditions basic to educational progress were, therefore, available. They were, however, being used in ways which not only conflicted with conditions needed for parents' learning, but actively created new pressures.

Aboriginal families, discouraged by unsolved problems, have made fewer demands on resources set aside for them. Referred back to regular community services, they have met a further and particularly damaging set of difficulties.

With multiple problems, families are often in contact with several official agencies at once, or over a limited period of time. There was, however, no apparent coordination of effort between these services. Policies appeared to be geared to the separate responsibilities and differing methods of Government Departments and agencies, rather than to the cumulative experience of people. There was the further problem of exposure to varying individual interpretations of official policies. Action taken without concern for its effects on other official services not only cancels out over time, but communicates informally to individuals that they do not really matter. When so many of Aborigines' problems, educational and other, originate in exactly this kind of feeling (i.e. there is a lack of concern for their welfare as individuals), the primary concern of any supportive program should be to communicate, at personal levels, something very different.

Constantly buffeted and left confused by a sequence of conflicting requirements and no agreement on priorities, a family may be in interaction with as many as six agencies (all responsible for different aspects of a total problem) without finding any real help with the problem as experienced. It was often the case that the pre-school teacher - perhaps the only person in frequent communication with the family on an individual and trusted basis - was the only one in a position to interpret the situation to parents and to help them think out the next step to take. Since this role had no official sanction, her feelings of moral obligation to offer some kind of support created for her a sense of conflict.

Many of these families lack the informal help which others can obtain from friends and neighbours. Their social isolation in the larger community restricts opportunities for incidental learning from those more experienced in obtaining help from community services. Since the overall outcome is not the result of decisions by any one person or even one department, there is no one to whom a parent can object. He or she is simply at the mercy of a system not designed to see situations or to act from the viewpoint of the individual needing support.

Those working with families in some professional capacity may similarly be at the mercy of such a system. Thus, a teacher may have her educational efforts of months cancelled out by an eviction order, by police action separating children from parents, or by the application of a policy in blanket "Aboriginal" terms, without reference to widely differing needs and viewpoints of families involved. When the building up of trust and effective communication is a personal and time-consuming matter, every effort needs to be made to sustain successfully established relationships. This cannot be treated as just a matter of funding. It is a matter of creating situations in which it is possible to carry out professional responsibilities, and of agreement on the work to be done, in relation to others interacting with a family. A basic problem to be resolved is whether the nature and timing of contacts with families is geared to prevention, rather than to the solving of crises which have already occurred. One arrives at somewhat different action decisions and activities from one or another set of concerns.

For both family and professional field staff, then, priorities in supporting families in their own course of development need to be decided before there is family interaction with various official programs. For example, when parents, for various reasons, do not meet official requirements for retaining a rented house, should they be evicted as a learning experience (in operant conditioning terms); or is it more important to try to sustain some stable family life and current educational contacts, so that the next generation, if not this, is less dependent on external controls and support?(There are many reasons other than motivational affecting the meeting of financial commitments , even when income appears to be adequate.) The teacher, by definition, must act on priorities which help people learn positive ways of coping in future, and which motivate voluntary acceptance of responsibilities, rather than conformity to requirements. In evaluating progress, it is necessary to be careful on which of these bases one is talking. If the former is not the direction of joint concern, it is pointless to fund education programs. Such funding should have meaning in terms of practical purposes and professional responsibilities, and not be done under a general label of "approved activity."

Currently, the administrative structure for funding work in the Aboriginal field is undergoing some basic reorganization. In time, this could have exceedingly positive effects, if provision is made for coordinating work, and for freedom of action at the local level. It is doubtful, however, if this will be accomplished in time to preserve and build on to either the field contributions or the study program of work initiated in this project.

Metropolitan
program

Re-loading project car after home visit teaching session

BEST COPY AVAILABLE

Metropolitan program

SECTION VI : EVIDENCE OF CHANGE IN CHILDREN PARTICIPATING IN PROJECT

Chapter 15

CHANGES EVIDENT ON RE-TESTING CHILDREN

This chapter presents three sets of data concerning changes in children as measured by initial and repeat tests. The histograms and t test results show changes at a group level; individual changes relative to test norms are documented in a further set of figures.

It will be remembered that this project was not designed to isolate program variables in a pre- and post-test experimental design, nor to contrast results with those of a control group. The testing program primarily provided descriptive information which helped in deciding teaching priorities, and gave some indication of levels of performance at different time points in a continuing sequence of learning in individuals.

The information in the following Tables and Figures is not, then, claimed to demonstrate effects from specific teaching procedures, nor to serve as the primary basis for evaluating this project. However adequate education programs may be, learning in children - or the lack of it - is the consequence of a total set of interactions between a unique individual and the structure of his own particular environment. The privilege of teaching does not, in our opinion, allow one to place set expectations on what a person *should* have learned in a given time, and to judge his progress in a comparative context. Neither teacher nor learner is in a position of such omnipotence.

What can be expected from either is some serious, sustained effort to provide or to use, to the best of existing abilities, what positive conditions for learning can be created in a particular set of circumstances. The differences in home environments and in personal characteristics with which one child or another in our programs had to deal, during the time period between tests, were dramatic. It can be said, however, that the programs created conditions conducive to efforts to learn in children; and that the data recorded in this chapter reflect intensive effort and concern, over a period, on the part of the teachers concerned, and their ability to introduce into highly unstable early environments conditions which increased children's chances of more optimum development.

Data in the following Tables and Figures are, therefore, useful as a basis for planning further work with particular children, and for dealing with matters of continuity in learning. One must think out how to build on to what *has* been achieved. This position is in contrast to that which uses such data to make judgments about what should have been achieved, or possibly what could have been achieved.

Some children had moved on to school or to a regular pre-school centre before re-testing was possible. This is indicated by symbols in the Figures. For the Swan Hill group, the time between all initial and repeat tests was approximately 12 months. For the Metropolitan group, time between Binet tests was again 12 months, and about 6 months between all others (with the exception of a few children.)

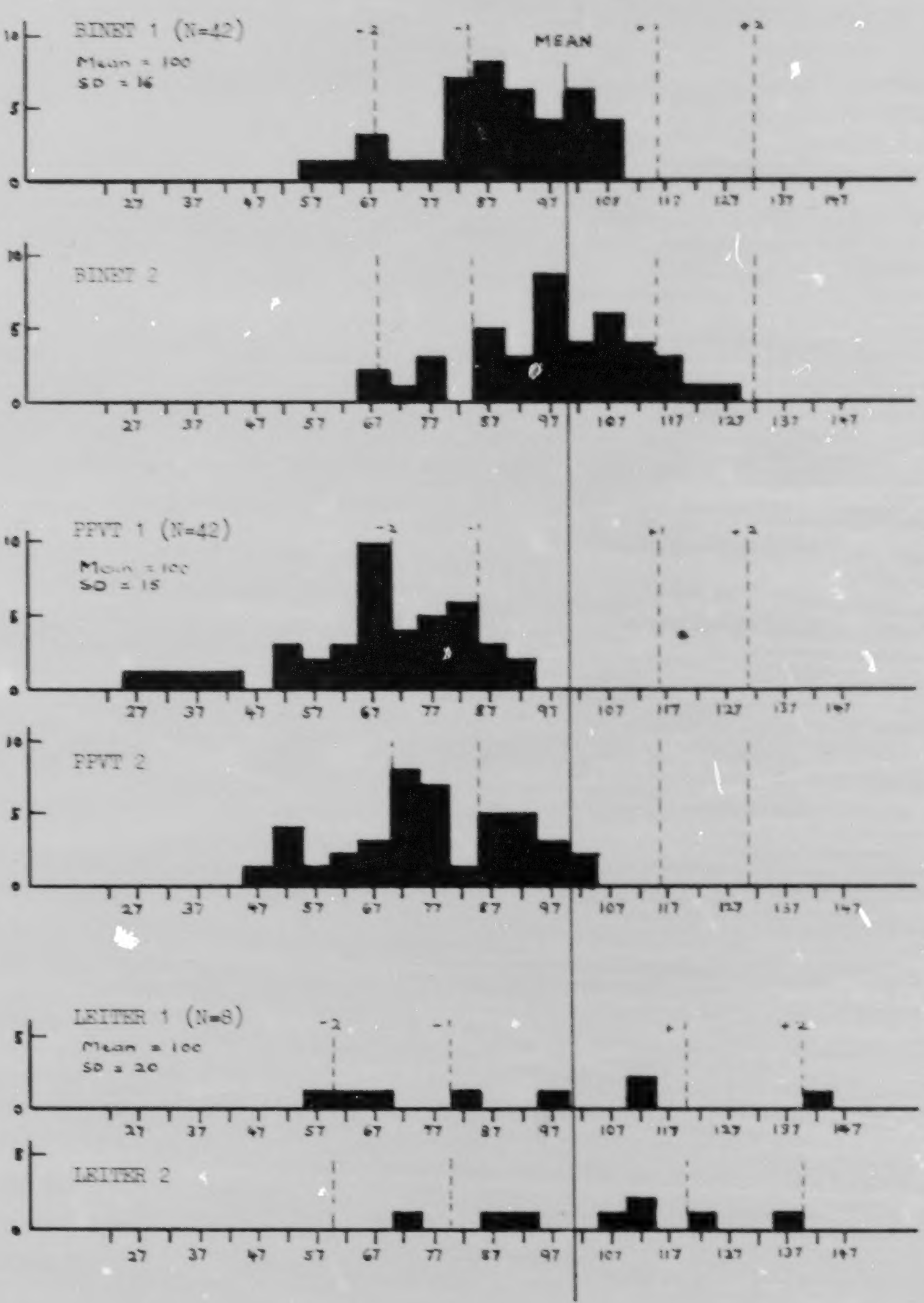

Figure 2 (a). Histogram: distribution of scores of part-Aboriginal children on initial and repeat tests - I.Q. scales - relative to means of standardization samples (See footnote Table 2 , p.114)

15.1 Evidence of children's progress

To the extent that higher scores on standardized tests of intelligence represent positive educational change, the data provide some indication that most of the children enrolled in this Van Leer pre-school program have not only made progress, but have made accelerated gains.

Changes recorded on test results appear sufficiently systematic to make it reasonable to conclude that some positive effects of an educational nature accrue from the overall, collective changes associated with the introduction of the persons and activities involved in the pre-school programs. This interpretation of differences between two sets of test scores should be carefully distinguished from one which claims that teaching efforts within program sessions with children were entirely responsible for the results, or that certain teaching procedures had specific effects. In an education program one neither can, nor wishes to, introduce the controls or the concentration on a very limited set of variables needed to meet scientific standards for studying causal relationships. It is important, however, to have some objective indications of progress in children, regardless of the relative contributions of home, planned programs, and other experiences.

There is a statistically significant change in test scores over both programs on all five measures, when t tests (repeated measures) are applied. Since care was taken to discard from initial tests those which were artificially depressed by a child's inability to cope with the test situation itself, and first tests were delayed in one program, results are considered likely to be an underestimate of the total change in children occurring during the period between tests. For the same reasons, one would expect any

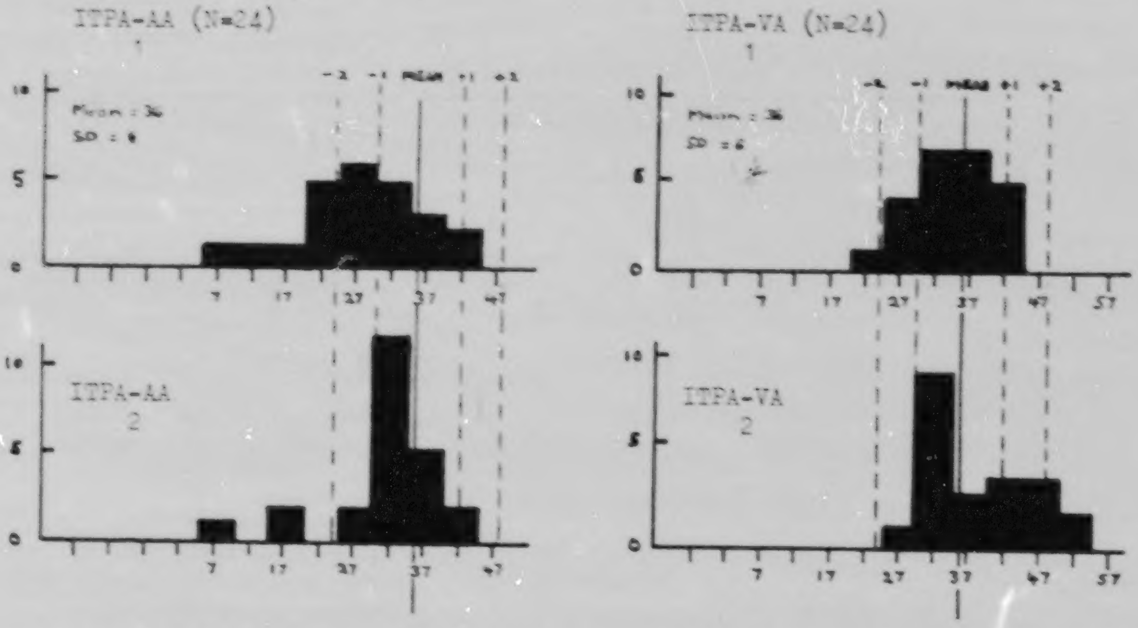

Figure 2 (b). Histogram: distribution of scores of part-Aboriginal children on initial and repeat ITPA sub-tests, relative to mean of standardization sample (See footnote Table 2 , p.114) practice effects on re-test results to be minimal.

Positive change over the group, on a test such as the Binet (which has been found to correlate consistently with progress in early school years, holding other variables at a reasonably constant level) gives some assurance that the pre-school programs instituted are of a useful nature. It is difficult to think of an equally convincing alternative explanation for the systematic direction of changes, particularly since knowledge of the families involved shows experience beyond the program to be highly dissimilar.

As stated in reviewing available tests, exactly what change scores are measuring is likely to be multi-dimensional, and inclusive of other areas of learning than cognitive; it is by no means well defined, nor thought to qualify for a concept of "intelligence" which has some common meaning. It would probably be generally agreed, however, that changes of the magnitude reported for this project represent positive and significant contributions of some kind or another to children's cognitive - and overall developmental - progress. Certainly, there was no direct effort to train children on test-type items, success on which might not generalize at all to other more everyday demands on abilities.

It is of interest to note that children's latest Binet test scores were significantly associated with school progress, as reported by teachers. (See chapter on school follow-up study for details)

Change scores were only available for a proportion of the children and some Figures presenting only a few change scores are included to complete the set; also to indicate the relative position of individuals at initial testing. It will be noted that gains are not limited to children whose comparative starting point was either particularly high or particularly below the usual expectations, nor to one program or another.

For just a few children, the picture is one of regression as they face increasing expectations over time. In these cases, there are diverse problems in family and child, the results of which would not, in any population, be expected to yield to anything but specialized remedial treatment. Attempts by teachers to arrange such help have uncovered a discouraging lack of adequate resources.

Changes of a few points on the individual test scores documented should not be given any weight; a third test check on a few children on some tests showed that directions may be reversed again within an even shorter time. This substantiates the points made in reviewing tests selected concerning a degree of unreliability in the measures themselves. Very likely, too, minor changes may represent fluctuating performance between initial acquisition of some skill or understanding, and the point at which it is maintained and generalized, and can be said to have a more permanent status in the repertoire of a young child.

Figures 3 - 7, showing such contrasting individual positions and rates of progress, which vary again for individuals on different types of tests, draw attention to the importance of not pressing on the field of pre-school education an approach to teaching based on reports of group results. Data from this project highlight the need to protect the individually-oriented approach characteristic of programs in the established pre-school field in Australia. They also show, however, that there are children in the community whose needs are not met by the usual group activities of pre-school centres.

TABLE 19

Changes in means between initial and repeat tests for groups attending Van Leer program only, or regular kindergarten or school following this *

Scale		Test 1		Test 2		d
		Mean	SD	Mean	SD	
BINET						
Van Leer	(N = 21)	86.33	(14.56)	95.43	(12.90)	+ 9.10
Regular kgtn.	(N = 6)	85.50	(9.38)	99.33	(15.50)	+13.83
School	(N = 6)	90.83	(13.69)	100.33	(18.60)	+ 9.50
Van Leer/School (6 months of each)	(N = 9)	97.00	(7.94)	101.67	(13.40)	+ 4.67
PPVT						
Van Leer	(N = 33)	68.30	(13.04)	74.64	(13.59)	+ 6.34
Regular kgtn.	(N = 2)	-	-	-	-	-
School	(N = 7)	69.28	(21.20)	81.71	(20.34)	+12.43
LEITER						
Van Leer	(N = 7)	90.12	(29.59)	105.50	(20.13)	+15.38
Regular kgtn.	(N = 1)					
BAYLEY - BINET 1						
Van Leer	(N = 9)	74.22	(13.65)	90.33	(13.91)	+16.11
ITPA - AA						
Van Leer	(N = 13)	27.46	(6.27)	32.54	(5.95)	+ 5.08
Regular kgtn.	(N = 1)	-	-	-	-	-
School	(N = 10)	26.60	(10.50)	29.20	(9.75)	+ 2.60
ITPA - VA						
Van Leer	(N = 14)	34.86	(5.61)	37.64	(5.37)	+ 2.78
Regular kgtn.	(N = 1)	-	-	-	-	-
School	(N = 9)	33.44	(3.84)	40.00	(7.97)	+ 6.56

* omitted where insufficient cases

TABLE 20

Comparison of sexes : change in means between initial and repeat tests for all part-Aboriginal boys and girls from both programs

Scale	N	Test 1		Test 2		d
BOYS						
		Mean	SD	Mean	SD	
BINET	21	86.05	(12.90)	93.67	(10.66)	+ 7.62
PPVT	19	63.95	(12.19)	73.63	(12.99)	+ 9.68
LEITER	3	79.67	(27.15)	92.33	(18.01)	+12.66
BAYLEY - BINET 1	4	70.00	(14.21)	86.25	(17.46)	+16.25
ITPA - AA	9	26.56	(6.33)	32.00	(6.61)	+ 5.44
ITPA - VA	9	33.22	(3.53)	36.89	(6.64)	+ 3.67
GIRLS						
BINET	21	92.24	(12.66)	102.38	(15.70)	+10.14
PPVT	23	71.52	(16.52)	77.91	(15.74)	+ 6.39
LEITER	5	96.40	(32.13)	113.40	(18.41)	+17.00
BAYLEY - BINET 1	5	77.60	(13.76)	93.60	(11.33)	+16.00
ITPA - AA	15	28.53	(10.00)	31.00	(8.59)	+ 2.47
ITPA - VA	15	35.20	(5.53)	38.93	(6.68)	+ 3.73

TABLE 21

Statistical differences between initial and repeat test scores according to program attended between tests : t tests (repeated measures)

Scale and program		t	p
BINET			
Van Leer	(N = 21)	6.2138	< .001 **
Regular kgtn.	(N = 6)	1.8786	ns
School	(N = 6)	3.0582	< . 02
Van Leer/School	(N = 9)	1.6763	ns
PPVT			
Van Leer	(N = 33)	3.4162	< .001 *
Regular kgtn.	(N = 2)	-	-
School	(N = 7)	1.8039	ns
LEITER			
Van Leer	(N = 7)	2.7568	< . 05
Regular kgtn.	(N = 1)		
BAYLEY - BINET 1			
Van Leer	(N = 9)	4.6165	< . 01
ITPA - AA			
Van Leer	(N = 13)	4.9984	< .001
Regular kgtn.	(N = 1)	-	-
School	(N = 10)	1.8895	ns
ITPA - VA			
Van Leer	(N = 14)	1.4429	ns
Regular kgtn.	(N = 1)	-	-
School	(N = 9)	3.1583	< . 02

** Change in Binet scores significant for both Van Leer programs: Swan Hill (N = 10) : t = 5.5803 p < .001; Metropolitan (N = 12) : t = 4.4461 p < .001

* Change in PPVT scores significant for Metropolitan program only : Swan Hill (N = 13) : t = 1.4860 ns; Metropolitan (N = 20) t = 3.3087 p < .01

TABLE 22

Comparison of sexes : statistical differences between initial and repeat test scores for all part-Aboriginal boys and girls from both programs

Scale and program	t	p
	BOYS	
BINET (N = 21)	4.0009	< .001
PPVT (N = 19)	3.5493	< . 01
LEITER (N = 3)	1.5056	ns
BAYLEY - BINET 1 (N = 4)	3.1334	ns
ITPA - AA (N = 9)	4.2133	< . 01
ITPA - VA (N = 9)	1.5680	ns
	GIRLS	
BINET (N = 21)	4.5419	< .001
PPVT (N = 23)	2.1946	< . 05
LEITER (N = 5)	2.1233	ns
BAYLEY - BINET 1 (N = 5)	3.0400	< . 05
ITPA - AA (N = 15)	2.0929	ns
ITPA - VA (N = 15)	1.8125	ns

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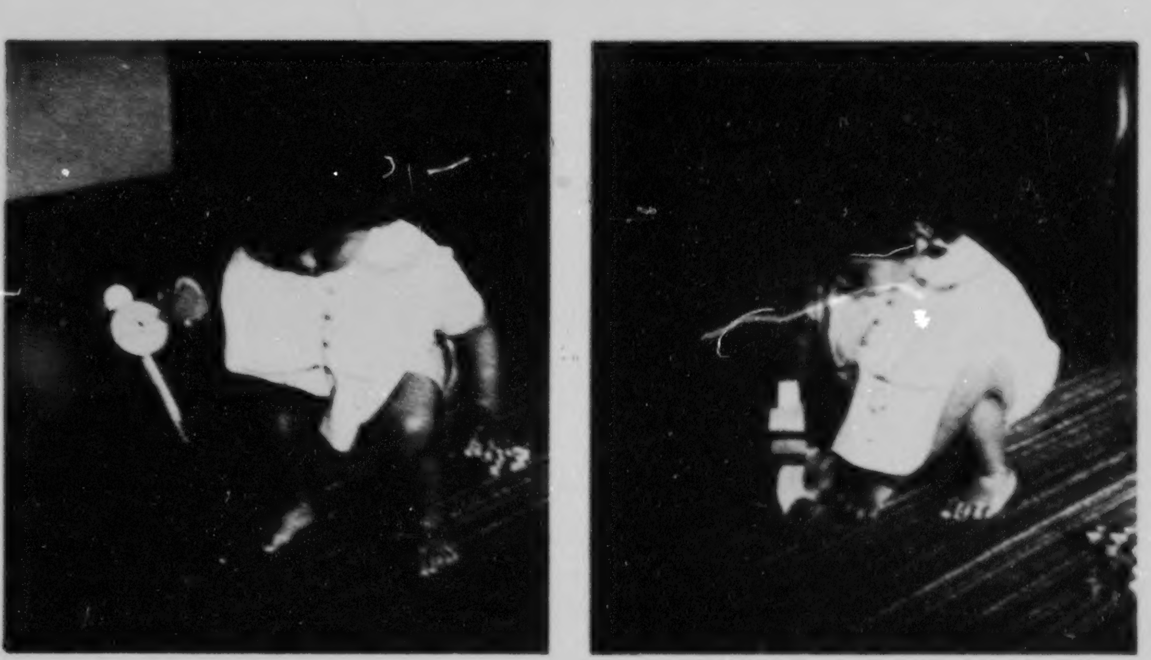
15.2 Individual change scores



Metropolitan program

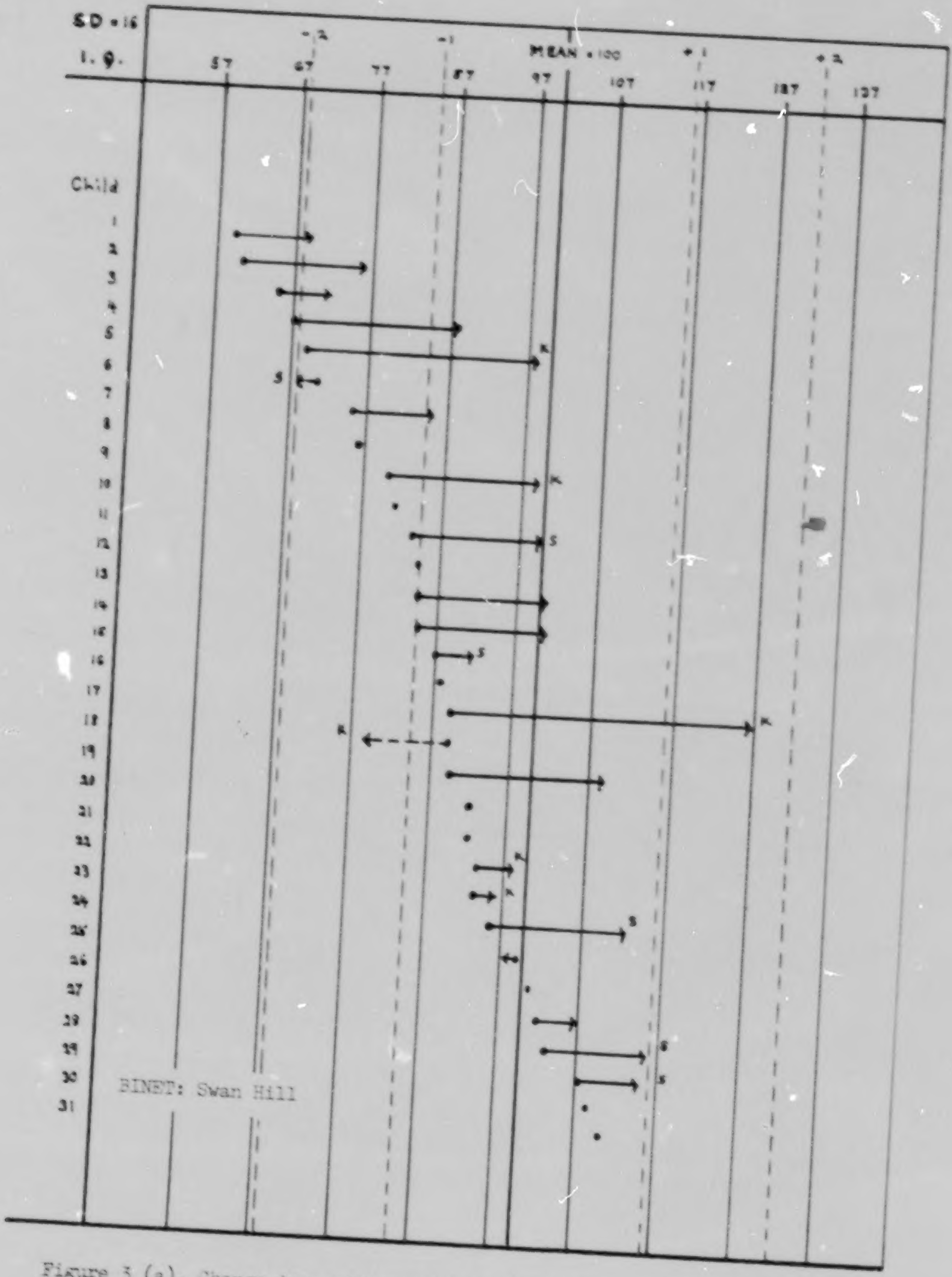


Figure 3 (a). Change in position of individual Binet scores, relative to mean of standardisation sample: Tests 1 and 2 - Swan Hill program

. = no re-test k = attending regular kindergarten between tests

s = " " "

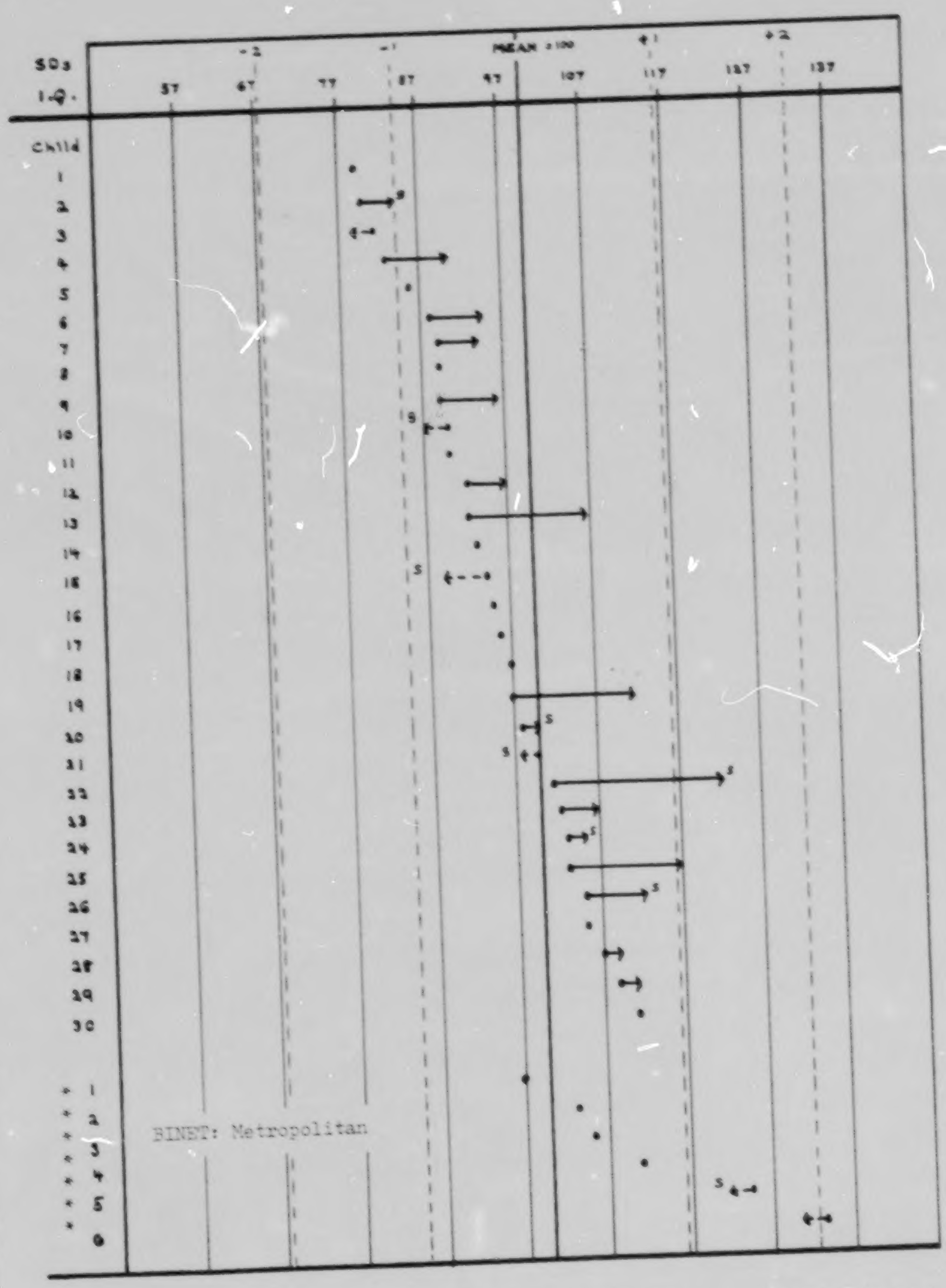


Figure 3 (b). Change in position of individual Binet scores, relative to mean of standardization sample: Tests 1 and 2 - Metropolitan program

* non-Aboriginal children

. = no re-test s = attended both Van Leer program and school between tests

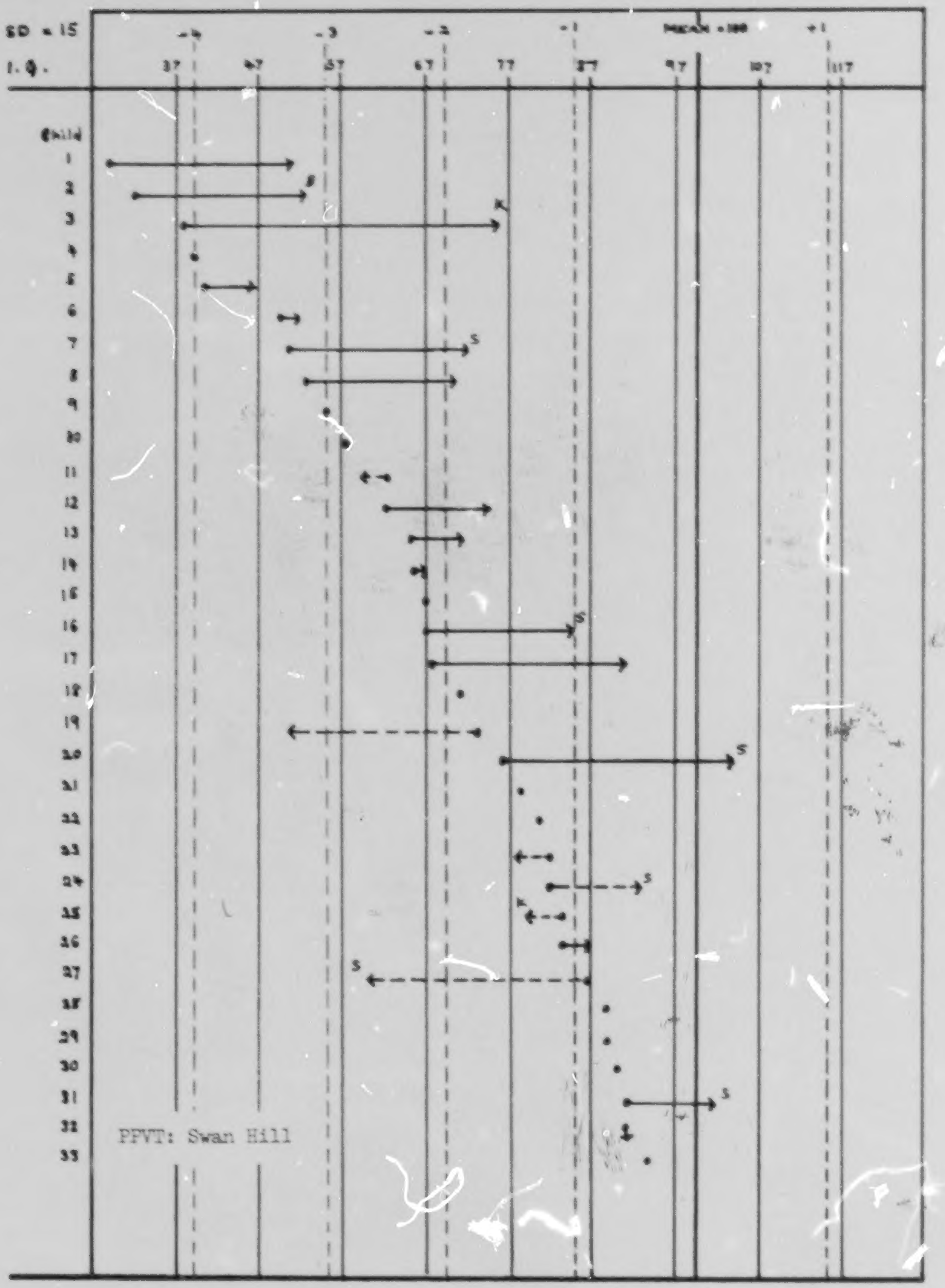


Figure 4 (a). Change in position of individual PPVT scores, relative to mean of standardization sample: Tests 1 and 2 - Swan Hill program

. = no re-test k = attending regular kindergarten between tests
s = " school " "

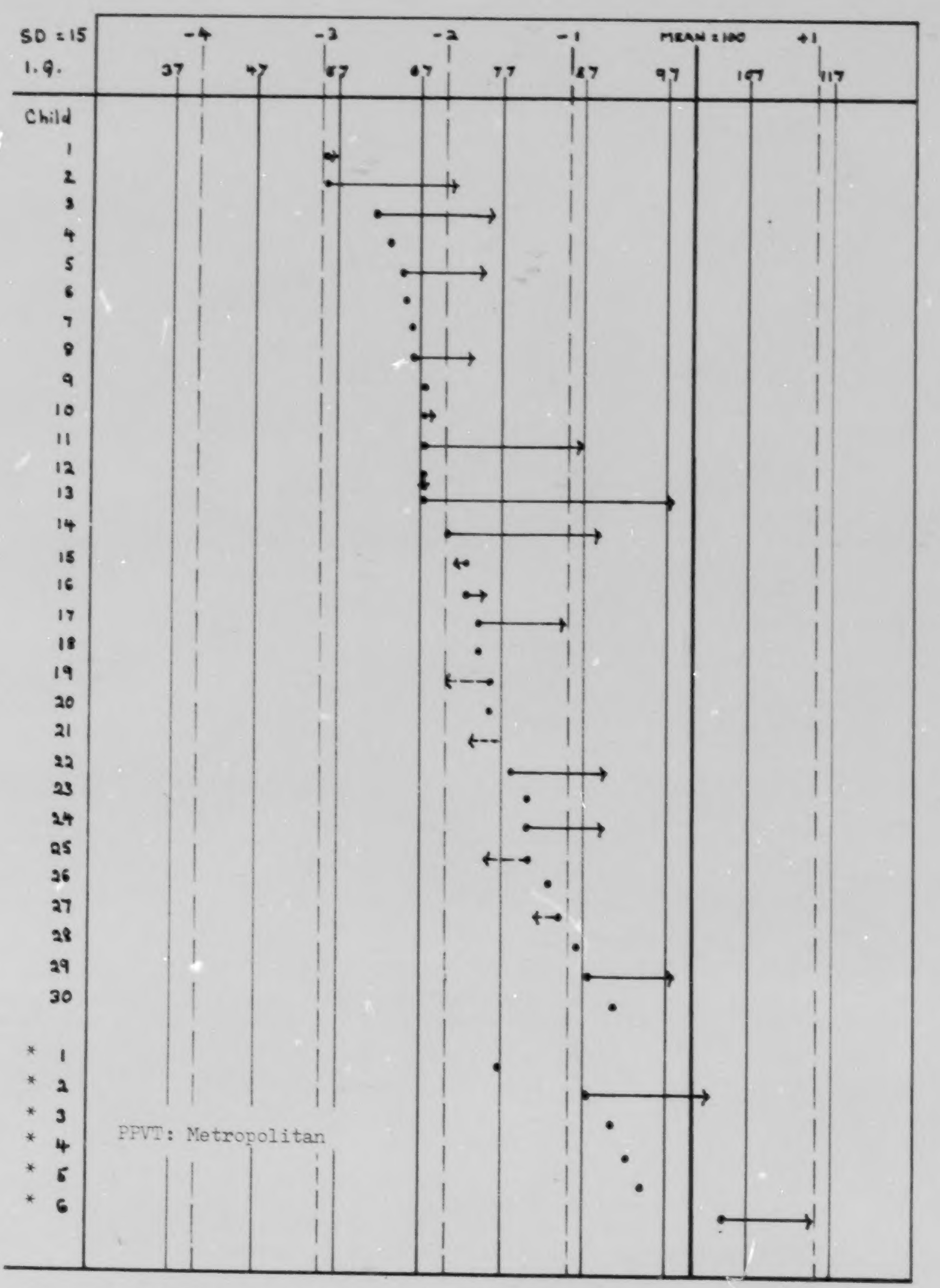


Figure 4 (b). Change in position of individual PPVT scores, relative to mean of standardization sample: Tests 1 and 2 - Metropolitan program

. = no re-test (all children still in Van Leer program at re-test)
* = non-Aboriginal

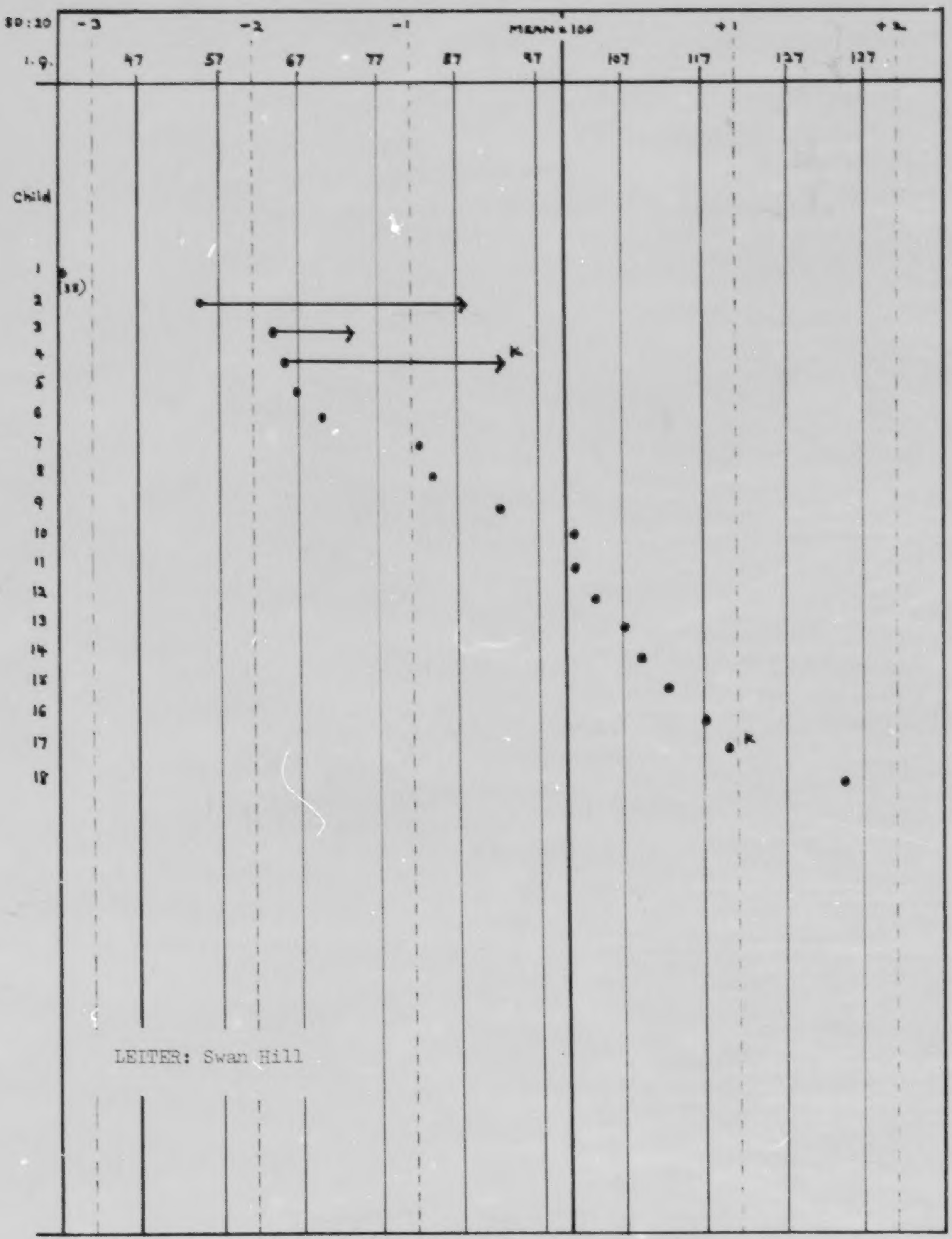


Figure 5 (a). Change in position of individual Leiter scores, relative to mean of standardization sample: Tests 1 and 2 - Swan Hill program

. = no re-test k = attending regular kindergarten between tests

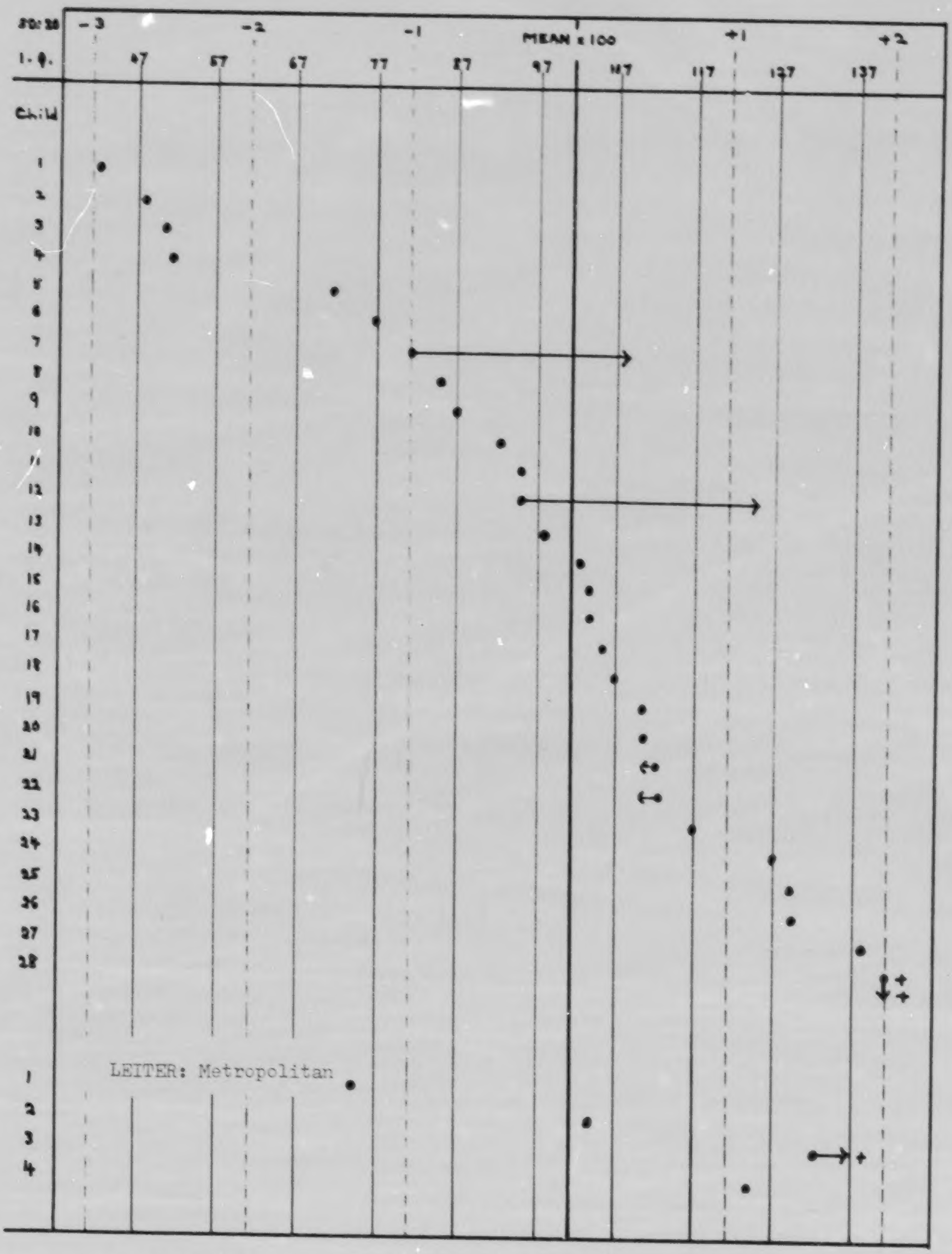


Figure 5 (b). Change in position of individual Leiter scores, relative to mean of standardization sample: Tests 1 and 2 - Metropolitan program

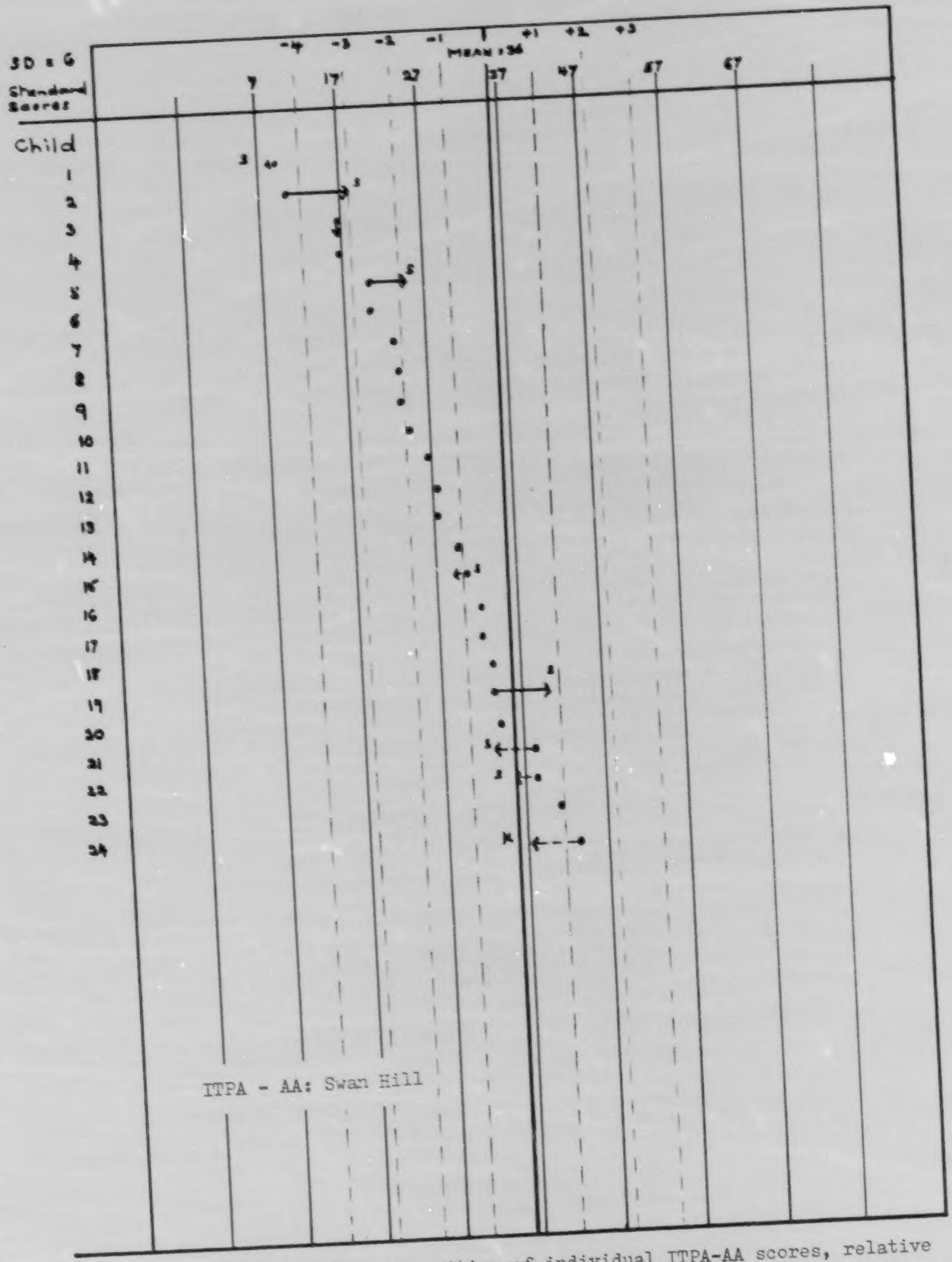


Figure 6 (a). Change in position of individual ITPA-AA scores, relative to mean of standardization sample: Tests 1 and 2 - Swan Hill program

. = no re-test   k = attending regular kindergarten between tests
s = " school " "

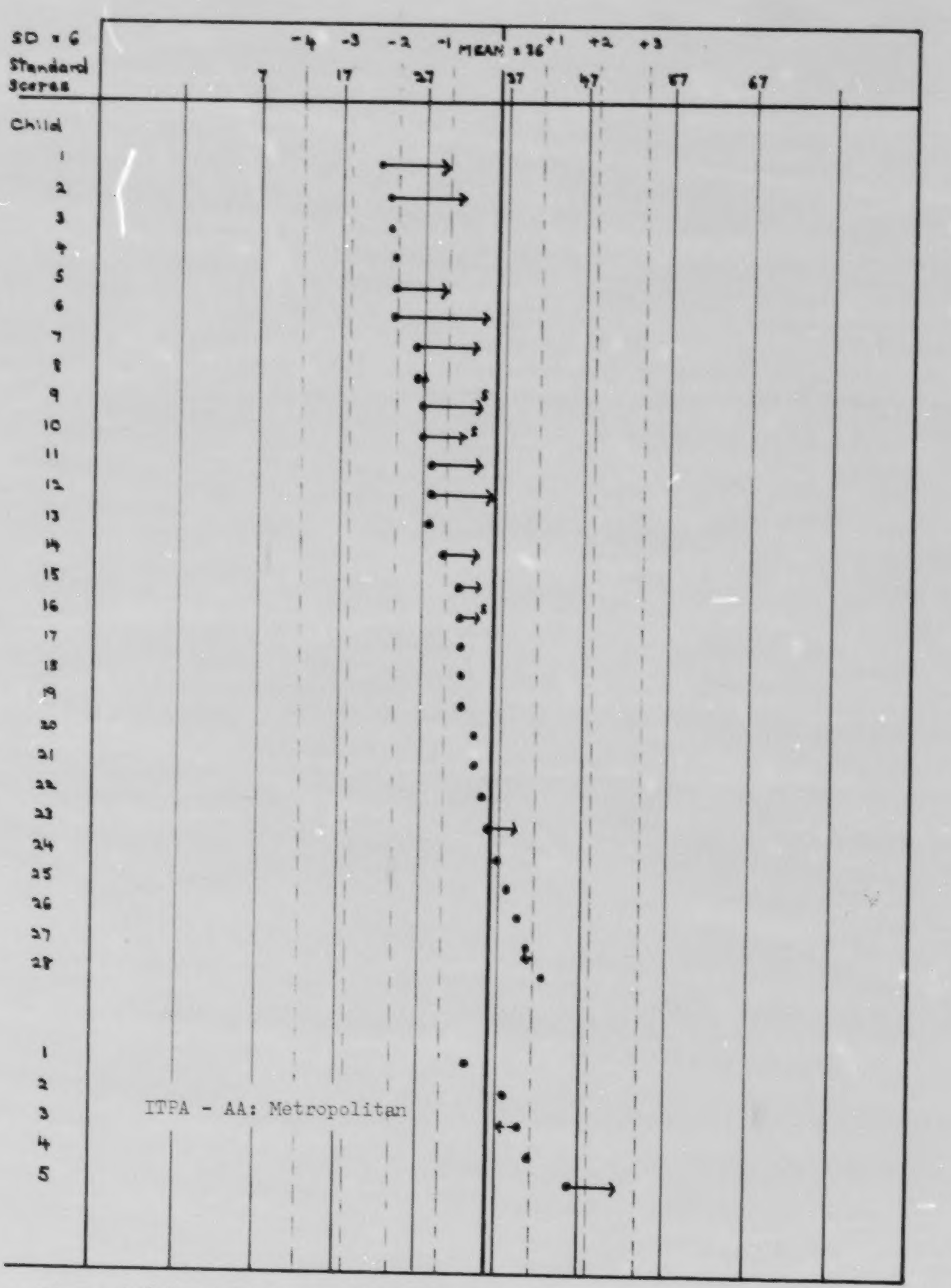


Figure 6 (b). Change in position of individual ITPA-AA scores, relative to mean of standardization sample: Tests 1 and 2 - Metropolitan program

. = no re-test   s = attending school between tests

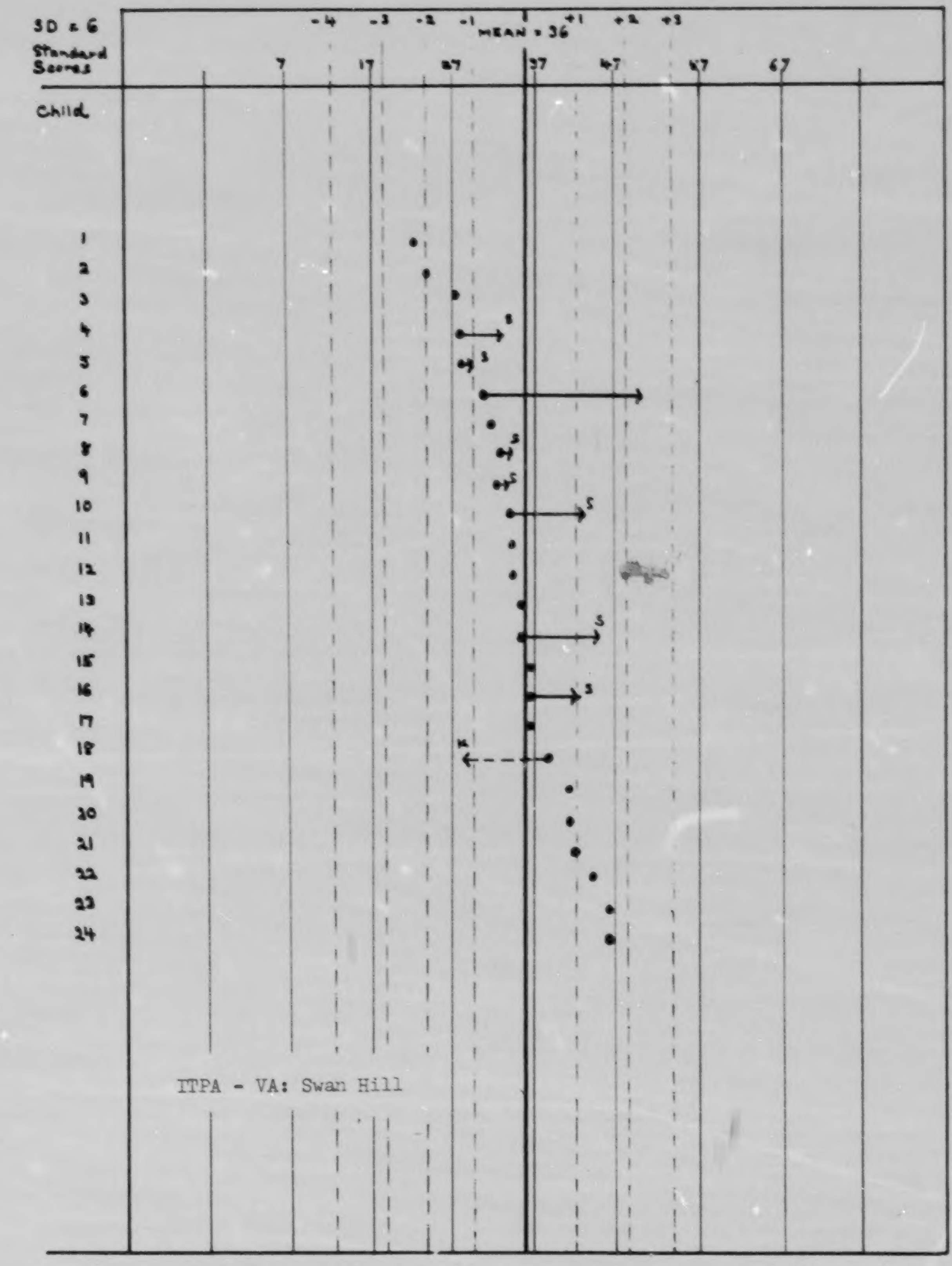


Figure 7 (a). Change in position of individual ITPA-VA scores, relative to mean of standardization sample: Tests 1 and 2 - Swan Hill

. = no re-test   k = attending regular kindergarten between tests
s = " school " "

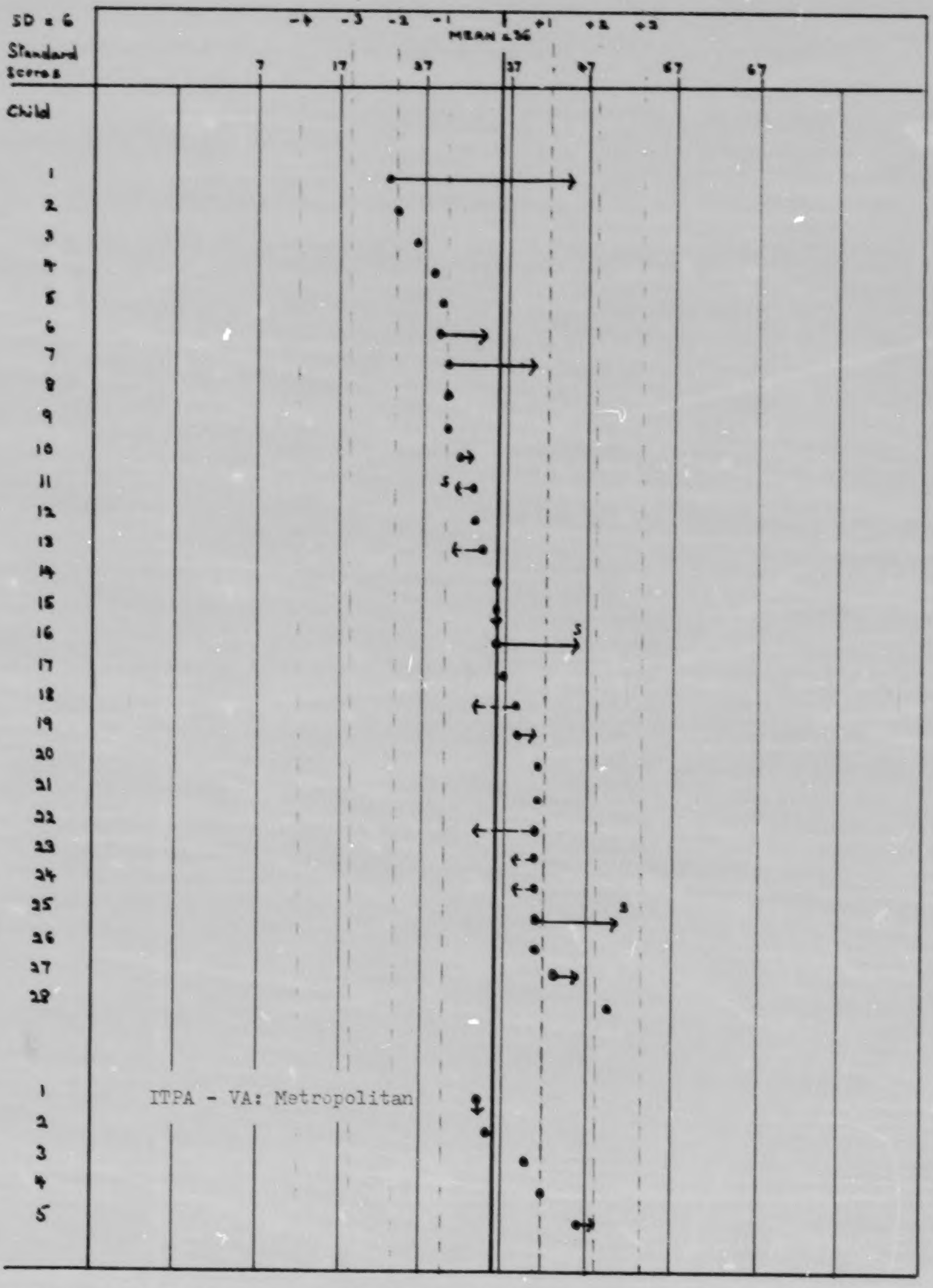


Figure 7 (b). Change in position of individual ITPA-VA scores, relative to mean of standardization sample: Tests 1 and 2 - Metropolitan

∘ = no re-test   s = attending school between tests

SECTION VII : SCHOOL FOLLOW-UP DATA

Chapter 16 INFORMATION FROM QUESTIONNAIRES : TEACHERS' PERCEPTIONS OF ACADEMIC PROGRESS AND BEHAVIOUR IN SCHOOL SETTING

16.1 Design and purpose of questionnaire to schools

As an introductory step in obtaining information on the continuing development of Van Leer Project children, an attempt was made to obtain a general picture of their academic progress and behaviour at school, as perceived by their teachers. This plan was implemented with the permission of the Director of Primary Education in Victoria, who allowed us to seek the co-operation of the schools at which children were enrolled. In Swan Hill and nearby towns, 6 schools were involved, and 6 in the Metropolitan area. Contacts with four of the Swan Hill schools, where the majority of children were enrolled, were made personally by the Project Co-ordinator and project teacher with the Headmaster and/or Infant Mistress, who in turn sought the co-operation of the relevant classroom teachers. Two further outlying schools were contacted by mail. In the metropolitan area, psychologists attached to the Education Department's Psychology and Guidance Section for the districts concerned assisted in obtaining questionnaire data, through their established contacts with schools in the area. The ready co-operation of the Regional Director of the Psychology and Guidance Department and the field work of staff at the local level, in expediting the collection of follow-up data for inclusion in this report, were much appreciated. At the same time information was obtained with respect to older siblings attending these schools, with a view to estimating the extent to which family variables, as against any pre-school program effects, might be operating.

In the case of several of the children, contact with the Infant Mistress had been made prior to school enrolment. However, none of the teachers responsible for completing questionnaires had any information relating to test results, nor to progress of individual children in the pre-school program - nor, in fact, to whether a particular child had actually participated. While the majority of children for whom information was sought were Aboriginal, some of course were white; and while the focus of our interest here was not disguised in any way, neither was attention drawn to it.

Care was taken in requesting co-operation from school personnel to indicate that what we needed was an accurate indication of children's progress and behaviour from the school's viewpoint; no expectancy of a diminution of problems posed by the school situation, as a result of any pre-school program contact, was suggested.

A copy of the questionnaire may be found in Appendix A. Questions were directed to three areas of interest :

1) The teacher's perception of children's progress in basic academic skills (reading, arithmetic and written expression).

2) Children's social behaviour with peers and adults.

3) Manifestations of learning behaviours and attitudes which the pre-school program had attempted to establish and/or reinforce.

Additional information on children's attendance, and on the extent and nature of contact between home and school was also sought.

The possibility of getting detailed and objective data on progress with academic skills was discussed with the staff of the Psychology and Guidance Branch, who helped with revisions to an initial draft of the questionnaire. It was agreed that this would constitute a major project in itself and one which could not be reasonably sprung on teachers at the end of term, and in the limited project time available. Consequently, the more realistic aim of this section of the questionnaire was to obtain the teacher's general perception of how a child was "coping" with basic subjects. Negative expectations of Aboriginal children are known to exist; research has shown that teachers' expectations can be a significant factor in learning (e.g., Rosenthal & Jacobsen, 1971). Thus data relating to teachers' expectations of children's progress was considered to be of some interest in itself. Respondents were invited to use a blank page attached to the questionnaire for any additional comments which they wished to make. This gave recognition to the possibility that an intentionally simplified questionnaire might prove a source of frustration to some teachers, as a vehicle for expressing what they considered important.

In contrast to the questions on academic progress, and on teachers' perceptions of parents' attitudes to the school, those on children's social and learning behaviours and on the type of contact with parents required objective description rather than evaluation; the teacher's awareness of characteristic individual behaviour patterns was involved in responses.

Questionnaires were completed for all children from the Swan Hill program attending school by 1972 (N=21) and for 20 older siblings from 10 of the same families who had started school prior to 1969.

In the Metropolitan area, follow-up data was obtainable for 16 of the 21 Aboriginal children who had left for school by 1972 (the whereabouts of the remaining 5 being uncertain) and for 19 older siblings from 8 of the same families. (In both programs, data was obtained for all siblings still attending Primary Schools; they were distributed through Grades 1-6.) Three of the 4 non-Aboriginal children from the Metropolitan program, attending school by that time, were also included in the follow-up survey.

The questionnaire was administered at the end of Term I. All copies distributed were collected personally, (with two exceptions by mail) making for 100 per cent returns. An occasional question had not been answered; where possible these were returned for completion.

Information from these questionnaires, reported in the following section, is viewed merely as an indication of the current experience of these Aboriginal children, across a range of schools; also as a general guide to thinking about some of the statements made concerning the contributions of pre-school education to academic progress, and on the predictive value of data from standardized psychological tests. Since an adequate control group of pre-school Aboriginal children (from whom all planned educational help was withheld) was not considered a practical or an ethical possibility, any pre-school program effects cannot be decisively separated from other influences.

16.2 Teachers' perceptions of children's progress in basic skills

Table 23 presents data obtained in response to the question : "How well is he/she coping with the following subjects this year? " Possible answers : "very well," "adequately" or "poorly."

TABLE 23

Academic progress of part-Aboriginal children previously in contact with the Van Leer pre-school program : group data **

Number and percentage* of children perceived by teachers to be progressing at various levels of adequacy (by program and sex).

School Subject	Perceived level of performance							
	Coping very well		Coping adequately		Coping poorly		Unknown or no response	
TOTAL GROUP (N=37)								
	N	%	N	%	N	%	N	%
Reading	8	22	12	32	17	46	0	0
Arithmetic	8	22	14	38	15	40	0	0
Written expression	4	11	11	30	15	40	7	19
SWAN HILL (N=21)								
Reading	3		6		12		-	
Arithmetic	3		8		10		-	
Written expression	2		5		11		3	
METROPOLITAN (N=16)								
Reading	5		6		5		-	
Arithmetic	5		6		5		-	
Written expression	2		6		4		4	
BOYS (N=20)								
Reading	2		8		10		-	
Arithmetic	3		9		8		-	
Written expression	2		6		9		3	
GIRLS (N=17)								
Reading	6		4		7		-	
Arithmetic	5		5		7		-	
Written expression	2		5		6		4	

** Preparatory grade: N=14 (S.H. 9; Met. 4: Boys 6; Girls 7.)
Grade I : N=17 (" 6 " 9 " 8 " 7)
Grade II : N= 6 (" 6 " 0 " 3 " 3)

* Percentages rounded to nearest unit

Summary of findings: perceived levels of adequacy in basic skills (Table 23)

1) In all three basic subjects, there were as many or more Aboriginal children progressing satisfactorily ("very well" + "adequately") as there were in difficulty. While this refutes negative stereotypes of the low performance in early school years of Aboriginal children in general, it also shows that about half this group could not meet the school's expectations with the usual amount of help. Unfortunately, the proportion of non-Aboriginal children from similar socio-economic circumstances, who are also in difficulty in the same schools, is not known. None of the three white children from the Metropolitan programs were reported to be performing "poorly" in any subject.

2) There were no marked differences between subject areas in the proportion of children seen to be coping "adequately" or "poorly;" of those coping "very well," more did so with reading or arithmetic than with written expression.

3) No sex differences were evident between the groups perceived as making "very good," "adequate," or "poor" progress in any subject.

4) Children reported as coping "very well" were distributed between country and metropolitan programs, for all three subject areas; the Swan Hill group contributed more heavily to the proportion reported to be making "poor" progress in each subject.

5) Level of performance as reported by teachers was not related to grade level, in any subject or either program.

6) A consistent level of performance across all three subjects was ascribed to 68 per cent of the total group; 29 per cent were ascribed equivalent levels on two of three; no children varied across all levels; in one case (3 per cent), available data did not permit coding on this variable.

7) Of the most consistent performers, 14 out of 25 (56 per cent) were consistently "poor;" of these, 10 out of 14 (71 per cent) came from the Swan Hill program, boys and girls being approximately equally represented; 16 per cent were seen to cope "very well" in all areas, the remaining 28 per cent, "adequately."

The use of all categories to describe academic performance over the group seems a reasonable indication that teachers considered individual progress in completing questionnaires, rather than being influenced by stereotyped evaluations on grounds of Aboriginality.

No consistent differences were evident between schools in the frequency with which children were seen to be performing at any one level of adequacy.

TABLE 24

Learning behaviours and attitudes in primary school part-Aboriginal children

Questionnaire item	Totals (N=37		Swan Hill (N=21)	Metropolitan (N=16)	Boys (N=20)	Girls (N=17)
	N	%	N	N	N	N
Investigates, asks questions about new things around school (Q.8)						
1) yes, voluntarily	14	37.8	8	6	8	6
2) yes, when attention drawn	15	40.6	6	9	10	5
3) no, little curiosity evident	8	21.6	7	1	2	6
Puts effort into, attends to work (Q.2)						
1) yes, voluntarily	17	46.0	8	9	8	9
2) yes, when teacher reminds	20	54.0	13	7	12	8
3) not even when teacher insists	0	0.0	0	0	0	0
Tackles new learning tasks (Q.3)						
1) eagerly	19	51.4	10	9	11	8
2) hesitantly	14	37.8	9	5	7	7
3) very reluctantly	4	10.8	2	2	2	2
Persists when meets difficulty in work (Q.4)						
1) of own accord	5	13.5	2	3	2	3
2) when encouraged	23	62.2	11	12	14	9
3) only when required	8	21.6	7	1	4	4
4) not known	1	2.7	1	-	-	1
Listens to teacher giving information, explaining (Q.5)						
1) yes, voluntarily	18	48.7	10	8	8	10
2) yes, when encouraged	11	29.7	5	6	7	4
3) no, difficulty in attending	8	21.6	6	2	5	3
Follows verbal directions from teacher (Q.1)						
1) without difficulty	20	54.1	13	7	13	7
2) with some difficulty	14	37.8	6	8	5	9
3) with much difficulty	3	8.1	2	1	2	1
Answers teachers questions on lesson content (Q.6)						
1) readily	17	46.0	6	11	9	8
2) only with persuasion	12	32.4	9	3	8	4
3) rarely, never	8	21.6	6	2	3	5
Teacher finds speech (Q.7)						
1) clear, easy to follow	21	56.8	12	9	10	11
2) somewhat hard to follow	12	32.4	7	5	9	3
3) very difficult to understand	3	8.1	1	2	1	2
4) not known	1	2.7	1	-	-	1

16.3 Academic progress and learning behaviours and attitudes

In the pre-school program we had been aware of the initial absence in some Aboriginal children of behaviours and attitudes which appear to be needed for progress with learning in general. Considerable effort and time had been necessary in establishing what would be considered by teachers as levels both of behaviour and of motivation for learning consonant with that of many Australian pre-school children. However, it should be noted again that we do not have information on such areas of development in non-Aboriginal children exposed to similar environmental factors. At the same time, it is possible that some incentives for learning seen in home and school settings of members of the non-Aboriginal community are not acceptable to members of the Aboriginal community.

In this section of the report, however, the questions to be explored concern the presence or absence of such behaviours and attitudes in children, in relation to their progress with learning basic skills in school; and whether or not the progress with these aspects of development, made with teaching help in the pre-school program, was maintained in the very different school learning situation. Table 24 shows the areas of development of interest, (as indicated by the questions aimed at obtaining behavioural evidence) and the results from school questionnaires.

Notes on questionnaire : measures of learning behaviours and attitudes

In designing the section of the school questionnaire on learning behaviours and attitudes, an effort was made to obtain objective (behavioural) measures of a kind which would separate specific dimensions of learning. There was, however, a limit to the extent to which this was possible, short of direct observation. The following notes are relevant to interpretations of the statistical findings reported.

1) Exploratory behaviour (Question 8)

There is a need in the literature to differentiate sensory exploration from intellectual curiosity and investigation. While the former is characteristic of early age levels, it is not necessarily an early form of the latter; one tends to relate to the level of stimulation sought (affecting the range of sensory input); the other to the level of perceptual and cognitive differentiation (affecting, for example, the clarity of concepts and expressing the ability to formulate questions). While Piagetian theory may not itself fail to make such a distinction, its terminology tends to contribute in this direction. This is confusing, since it may well be that the two have some conflicting elements. In our case, the general question was geared to intellectual interest, curiosity, question-asking, but it is possible that responses reflected some purely sensory exploration also.

2) Listening to teacher (Question 5)

The main issue here was intended to be one of the child's attention to auditory stimuli. There are, however, social issues involved, affecting motivation, as well as those of competing sensory modes; also the possibility of temporary or more permanent impairment of hearing due to chronic infection. (Hearing tests were arranged where possible through the pre-school program, before school entry, in cases of suspected auditory handicap.) Further, there is likely to be a circular relationship between attention to the teacher's explanations and level of verbal comprehension.

3) Comprehension of verbal directions (Question 1)

While following directions "with ease" infers verbal comprehension (even if supported by visual cues), a negative response may reflect not only failure to understand but resistance to action, or both - or even psychological "deafness."

4) Readiness to answer questions on lesson (Question 6)

The significance of this question was a matter of whether or not a child felt able to risk being wrong sufficiently to give the teacher feedback on what was understood or not. Any relationship occurring between readiness to answer questions and academic progress also, however, reflects an underlying confidence with which both are likely to be associated. Further study could clarify such questions.

While it is generally recognized that all human behaviours have multiple dimensions, these notes serve as a protection against assuming that interpretations are reversible. When the behaviour of interest occurs, one can safely assume that any one of its prerequisite elements has been learned. But when it does not, one may not assume that any particular one of the prerequisites is missing without further tests which isolate these. There is a tendency to assume, for instance, that the absence of adequate listening behaviours or the ready answering of teachers' questions are largely matters of motivation which can be improved on demand; alternatively, failure to follow verbal directions tends to be interpreted as lack of "intelligence" - hence guidance towards improved levels of performance may be inappropriate, and may merely add to the child's current pressures.

Findings

Chi square tests (incorporating Yates's correction for continuity) were used to examine statistical relationships between the data obtained in regard to school progress in three basic subjects and learning behaviours and attitudes. Table 25 presents the results. (The lower Ns for Written Expression occur because some children apparently had not started work in this subject when the questionnaire was completed.)

1) Exploratory behaviour was the only dimension of learning behaviours and attitudes studied which was not associated significantly with progress in learning basic skills, although for reading and arithmetic, chi squares approached the .05 level of significance. This finding is in keeping with the nature of what is to be learned; basic skills of communication and formal systems of computation must be learned, receptively, from other human beings - they cannot be acquired by self-initiated investigations. This finding is also in tune with awareness that children whose curiosity has been stimulated, through exploratory opportunities and adult encouragement at pre-school level, may well present a problem to primary school teachers, responsible for helping them acquire academic skills.

At the same time, the data may be seen to reflect the incompatability in these two systems of behaviour - active exploratory/passive receptive - which is recognized by Piaget and others (eg. Furth, 1970).

TABLE 25

Relationships between academic progress and learning behaviours and attitudes

Aspects of learning	N	Chi square*	Probability
1) Academic progress and exploratory behaviour (Q.8)			
Reading	37	2.137	ns
Arithmetic	37	3.370	ns
Written expression	30	1.534	ns
2) Academic progress and concentration, effort (Q.2)			
Reading	37	4.803	$p < .05$
Arithmetic	37	2.583	ns
Written expression	30	4.887	$p < .05$
3) Academic progress and attitude to new learning tasks (Q.3)			
Reading	37	11.914	$p < .001$
Arithmetic	37	12.148	$p < .001$
Written expression	30	8.533	$p < .01$
4) Academic progress and persistence in face of difficulty with work (Q.4)			
Reading	36	10.127	$p < .01$
Arithmetic	36	13.026	$p < .001$
Written expression	29	9.149	$p < .01$
5) Academic progress and listening to teacher (Q.5)			
Reading	37	10.127	$p < .01$
Arithmetic	37	10.329	$p < .001$
Written expression	30	10.848	$p < .001$
6) Academic progress and comprehension of verbal directions (Q.1)			
Reading	37	5.964	$p < .02$
Arithmetic	37	9.586	$p < .01$
Written expression	30	6.562	$p < .02$
7) Academic progress and readiness to answer questions on lesson (Q.6)			
Reading	37	12.359	$p < .001$
Arithmetic	37	8.708	$p < .01$
Written expression	30	11.250	$p < .001$
8) Academic progress and clarity of speech (Q.7)			
Reading	37	10.813	$p < .01$
Arithmetic	37	10.473	$p < .01$
Written expression	29	10.296	$p < .01$

* with Yates's correction for continuity

TABLE 26

Contingency tables for chi square tests : academic progress** and learning behaviours and attitudes* in part-Aboriginal children

Reading				Arithmetic				Written expression			
Academic progress & exploratory behaviour											
	VW/A	P			VW/A	P			VW/A	P	
1 & 2	18	11	29	1 & 2	20	9	29	1 & 2	13	9	22
3	2	6	8	3	2	6	8	3	2	6	8
	20	17	37		22	15	37		15	15	30
$X^2 = 2.1372$				$X^2 = 3.3696$				$X^2 = 1.5341$			
Academic progress & effort, concentration											
	VW/A	P			VW/A	P			VW/A	P	
1	13	4	17	1	13	4	17	1	10	3	13
2	7	13	20	2	9	11	20	2	5	12	17
	20	17	37		22	15	37		15	15	30
$X^2 = 4.8030$				$X^2 = 2.5828$				$X^2 = 4.8869$			
Academic progress & attitude to new tasks											
	VW/A	P			VW/A	P			VW/A	P	
1	16	3	19	1	17	2	19	1	12	3	15
2 & 3	4	14	18	2 & 3	5	13	18	2 & 3	3	12	15
	20	17	37		22	15	37		15	15	30
$X^2 = 11.9140$				$X^2 = 12.1485$				$X^2 = 8.5333$			
Academic progress & persistence											
	VW/A	P			VW/A	P			VW/A	P	
1 & 2	20	8	28	1 & 2	22	6	28	1 & 2	15	6	21
3	0	8	8	3	0	8	8	3	0	8	8
	20	16	36		22	14	36		15	14	29
$X^2 = 10.1270$				$X^2 = 13.0262$				$X^2 = 9.1490$			

** VW/A = coping "very well or adequately"; p = coping "poorly"

* See Table 24 for codes

TABLE 26 (continued)

Contingency tables for chi square tests : academic progress and learning behaviours and attitudes (continued)

Academic progress & listening to teacher

	Reading			Arithmetic			Written expression		
	VW/A	P		VW/A	P		VW/A	P	
1	15	3	18	16	2	18	12	2	14
2 & 3	5	14	19	6	13	19	3	13	16
	20	17	37	22	15	37	15	15	30
	χ^2 = 9.9126			χ^2 = 10.3290			χ^2 = 10.8482		

Academic progress & difficulty following verbal directions

	Reading			Arithmetic			Written expression		
	VW/A	P		VW/A	P		VW/A	P	
1	15	5	20	17	3	20	12	4	16
2 & 3	5	12	17	5	12	17	3	11	14
	20	17	37	22	15	37	15	15	30
	χ^2 = 5.9636			χ^2 = 9.5864			χ^2 = 6.5625		

Academic progress & answering questions on lesson

	Reading			Arithmetic			Written expression		
	VW/A	P		VW/A	P		VW/A	P	
1	15	2	17	15	2	17	11	1	12
2 & 3	5	15	20	7	13	20	4	14	18
	20	17	37	22	15	37	15	15	30
	χ^2 = 12.3586			χ^2 = 8.7079			χ^2 = 11.2500		

Academic progress & clarity of speech

	Reading			Arithmetic			Written expression		
	VW/A	P		VW/A	P		VW/A	P	
1	17	4	21	18	3	21	14	4	18
2 & 3	3	12	15	4	11	15	1	10	11
	20	16	36	22	14	36	15	14	29
	χ^2 = 10.8129			χ^2 = 10.4727			χ^2 = 10.2959		

2) All other learning behaviours and attitudes were strongly related to school progress. For six dimensions the probability was $< .01$ and sometimes well beyond the .001 level of significance. Concentration and effort were least strongly related to progress ($p < .05$) and not significant in the case of arithmetic - possibly reflecting differences in the need to concentrate; also the fact that no amount of concentration will solve, in itself, the problem of uncomprehended mathematical concepts, whereas it may well help with the perceptual differentiation of words (in reading or writing skills) and with having some thoughts to communicate (in written expression).

3) Of the three most significantly associated measures, all are strongly attitudinal rather than skill-based. Attitudes to new learning tasks, persistence in face of difficulty, and readiness to answer questions carry, like all behaviours, physiological and cognitive components but demonstrate, in their positive form, a state of general confidence known to affect motivation to learn.

Without direct observational data, it is possible that the strong relationships reported between learning behaviours and academic progress, and the absence of such for exploratory behaviour, reflect the automatic associations and values of primary teachers who have specific responsibilities. Most questionnaire items did, however, specify distinct stimulus situations which serve to differentiate behavioural responses; there was also sufficient variation in answers to suggest that they were not automatic.

Metropolitan program

Significance of findings on curiosity, exploratory behaviour?

What is the point of the preceding analysis for a report concerned with how information is used in education? Should we, for instance, put less emphasis on self-initiated efforts at discovery at the pre-school or school level, since in this group, and at this age level, it was unrelated to progress with necessary basic skills with which some children appear to be struggling? Findings could be used to argue for such a position if these findings were replicated in other studies.

One needs to revert here, however, to the basic question of purpose raised at the start of this report. Is the educational 'problem' to help Aboriginal children cope with the existing school system, or is it to help them to learn - amongst other things - what is necessary for more confident and equal participation in general community affairs?

The learning of basic academic skills has little educational point if one is not aware of their relationship to possible areas of discovery, or of discoveries one wishes to communicate. Further, many of the problems of some part-Aboriginal adults appear to arise from lack of awareness of aspects of their environment, lack of information available to others, and lack of understanding of causal relationships. There seems in some families a fatalistic acceptance of unpleasant events which other members of the community have learned how to control to some extent. Nothing seems more relevant than increased self-initiated explorations, a wider range of experience, and some experimental interest in cause and effect, to supporting efforts towards increased autonomy. Somehow, progress with both sets of learning must be made, even if this reduces the immediate possibility of accelerated effects on one. In the long run, to isolate the learning of basic skills from concurrent exploration of the environment in which one lives is to remove the need and the intrinsic motivation necessary for their acquisition, reducing them merely to the level of socially-acceptable forms of accomplishment - possibly leading to more socially acceptable jobs.

Significance of findings on learning behaviours and attitudes?

It is generally accepted that attitudes to learning, attentional skills and ability to communicate are highly likely to be important influences in any formal learning situation. While there is room for questioning or elaborating the familiar, data from this project provide no basis for doubting associations here. It does, however, illustrate the need to give attention to what practical interpretations are given to existing knowledge and the extent to which, and accuracy with which this is used. These are direct responsibilities for the field of education.

There tend to be some consistent biases in the usual applications of knowledge about motivation and learning. Children's attitudes to learning and attentional behaviours are usually interpreted as pre-existing influences on their progress; the problem, if there is one, is seen to be in the child. He is deficient in some areas of feeling and learning which create problems for the teacher; the response is frequently to focus directly on motivational issues.

There is, however, at least an even chance that the problem originates in the educational program. Correlations merely indicate co-variance, and not the direction - or even the presence - of causal relationships.

It is known from principles of learning theory and from practical experience that attitudes result from experience, and attitudes to learning from learning experiences, and that over time the relationship is circular. It is known that while the cumulative effects of past experiences are carried forward into new situations, the consequences of behaviour in new situations are responsible for maintaining or extinguishing previously learned positive behaviours or for building negative ones and that an influence in either direction is immediately operative.

In the pre-school program, positive attitudes to learning and learning behaviours had been acquired by children, some of whom appeared to be unfamiliar with feelings of accomplishment of any kind at all, or with situations in which adults presented them with expectations and gave them positive help to meet these. Such attitudes would not have been learned if these children had been faced immediately with expectations of immediate readiness to participate in a regular pre-school group. There was a major adjustment of expectations in order to allow the fairly high probability of success needed to build interest and sustain effort in young children. Gains in learning were made. This was not a matter of lowering "standards," but one of being careful not to confuse goals with effective ways of reaching them.

Thinking back, then, to the previous diagrammatic presentation of change scores on psychological tests one might ask again : what is likely to be the effect on the learning attitudes and behaviours of children - most making some, and usually relatively accelerated progress, but from widely differing starting points - when presented on commencing school with fairly similar academic and social requirements, and evaluation in relation to others? Expectations now are associated with age, rather than with previous experience and what is already learned - and this occurs in a social situation which publicizes any difficulty in meeting them. To what extent does this system express what is known about positively motivating conditions for learning?

Information from research that environmental factors are theoretically responsible for some of the large observed differences in children's cognitive functioning does not allow us to act, in education, as though negative forms of such factors have already been removed. (Some, perhaps, may not be open to direct or immediate modification; some will certainly be the concern of other professional or community groups; some will depend on changes in the general environment.) Neither have new findings on environmental effects negated knowledge that genetic contributions to learning also vary between individuals.

Discussions on equality of opportunity in education have been heavily oriented to provision of physical facilities, and equal opportunities for attendance. They might, appropriately, be re-directed to concern with the rights of individuals to work at learning to the best of their ability, with awareness of their own progress. The sense of failure acquired early by some children seems an unnecessary result of arbitrary social expectations which place them - through no fault of their own - in the category of those needing "remedial" help. This is done in a social situation in which their "failure" is made exceedingly public, and there may be little opportunity to develop alternative abilities, possibly of equal value to society. This form of social discrimination is an unintended outcome of current answers to the difficult task of organizing children's formal education. It is now so institutionalized, however, that we forget its potency and the likelihood that it operates to the severe disadvantage of Aboriginal children, and we look for much less basic reasons for some of their current problems in school.

The community may need to ask whether it is the social convenience of adults or the educational needs of children which prompts such rigid organization of learning opportunities, and definition of acceptable progress.

In this situation, concern with "drop-out rates" and with providing incentives for school attendance in the form of bursaries or promises of improved employment prospects, appear to be of doubtful value. They deal only with the symptoms of underlying negative factors. More attention to children's previous experience, less rigidly time-related expectations, more flexibly organized social learning situations, and a different basis for evaluating progress might well result in more positive outcomes. Recognition of the significance of children's immediate experience in learning situations need detract nothing from efforts to deal with environmental factors which limit their relative accomplishments.

The significance of the general issue of continuity or lack of it in learning experience - at an extreme level - has been expressed, saliently, by some Aboriginal parents in talking with the Project Co-ordinator. While unlikely to be the only major factor involved it seems to deserve some priority. One mother, describing her own school experience and that of her sisters commented: "We were doing all right at school - then we missed several years while our parents went from one place to another looking for jobs. When we started again, the teacher just assumed we had done all that work. From then on, we didn't know what we were doing, and somehow you couldn't explain to the teacher. It was awfully confusing. You just sort of give up then."

16.4 Academic progress and test results

One of the reasons for using the Binet test, and for interest in change between initial and repeat testing was the known reliability of the Binet test in predicting progress at school. What were the results for Aboriginal children? To what degree were other tests used relevant to academic achievement in early Primary school grades?

Test scores and questionnaire data on progress at school were obtained quite independently. The time lag between tests and questionnaire responses varied from approximately 6-18 months (see note later on content of intervening experience). Each child's latest available score on each test was used in this analysis. The group was dichotomized according to the norm of the tests :

1) Less than - 1/4 SD and above the norm of the test standardization sample : 97 or more on Binet, P.P.V.T. and Leiter scales and 34 or more on I.T.P.A. sub-tests

2) - 1/4 SD and below : 96 or less on I.Q. and Leiter scales and 33 or less on I.T.P.A. sub-tests.

The same summary across three subject areas as that reported earlier was used for the questionnaire data, resulting in the two broad groupings of :

1) Coping very well or adequately over three basic subjects (reading, arithmetic, written expression)

2) Coping poorly in two or more basic subjects

TABLE 27

Relative distribution on tests of children[x] reported to be coping or in difficulty with learning basic skills

Standard deviations from norm of each test (standardization sample)

Level of performance	-3 or below	-2	-1	$-\frac{1}{2}$	-1/4	Mean	+1/4	$+\frac{1}{2}$	+1 or above
BINET (N = 37)									
Coping very well	-	-	0	0	2	0	0	2	2
Coping adequately	-	-	0	0	5	2	1	3	3
Coping poorly	-	-	4	8	3	0	1	0	0
TOTAL	-	-	5*	8	10	2	2	5	5
P.P.V.T. (N = 37)									
Coping very well	0	2	1	1	0	2	-	-	-
Coping adequately	0	4	4	4	0	2	-	-	-
Coping poorly	2	10	2	1	1	0	-	-	-
TOTAL	3*	16	7	6	1	4	-	-	-
LEITER (N = 24)									
Coping very well	-	-	0	0	0	2	0	2	1
Coping adequately	-	-	2	0	2	2	0	3	3
Coping poorly	-	-	2	3	1	0	0	0	0
TOTAL	-	-	5*	3	3	4	0	5	4
I.T.P.A. - A.A. (N = 34)									
Coping very well	-	0	0	4	1	0	0	0	1
Coping adequately	-	0	3	2	2	1	3	1	1
Coping poorly	-	4	5	1	2	1	0	1	0
TOTAL	1*	4	8	7	5	2	3	2	2
I.T.P.A. - V.A. (N = 32)									
Coping very well	-	-	0	1	2	0	0	0	3
Coping adequately	-	-	1	0	2	3	0	4	5
Coping poorly	-	-	3	2	0	1	0	0	4
TOTAL	-	-	5*	3	4	4	0	4	12

[x] Includes 3 non-Aboriginal children

* Indicates position of one child included in totals for test position but not codeable on "coping" summary

Chi square tests were also applied to separate school subjects. (Since expected frequencies were relatively small throughout, Yates's correction for continuity was incorporated in the formula.) Swan Hill and Metropolitan cases were combined for this analysis.

Commentary

Repeat Binet test scores, obtained following children's experience in the Van Leer programs, showed a significant relationship ($p < .01$) with their general ability to deal successfully with school requirements in basic aspects of academic work. Since the time between these final Binet tests and school follow-up questionnaires varied from 6-18 months, and more cases of "not coping" fell into the group for which the time lag was longest, the possibility that school performance was more affected by intervening experience than by Binet scores was examined.

For all but 8 children, the time lag represented school (plus home) experience almost entirely. Repeat Binet tests had been carried out after school entry or right at the end of the previous pre-school year. For the remaining 8, six months of pre-school attendance and six of school attendance were involved.

There were no differences in school progress associated with the time interval which were not accounted for by pre-existing Binet scores. (The longest time lag was for Swan Hill children who accounted for the greater number of extremely low test scores, as well as a greater proportion of children in difficulty in school.)

The Leiter test was also related ($p < .01$) to school performance. This is of interest in view of its non-verbal nature, and the current theoretical over-concern with language development as the only pre-requisite for learning basic skills.

Neither the P.P.V.T. nor the I.T.P.A. sub-tests were significantly associated with reported adequacy of progress in early school grades. The Peabody test failed to differentiate children; some with Peabody scores as low as -2 SDs from the mean of the test were still coping "adequately" - and some "very well" with academic work while others with identical scores on this scale were not. Table 27 shows the comparative distribution on all tests of children reported to be coping or in difficulty with early academic work, relative to the norm of the test.

The data obtained from this sample of Aboriginal children is in line with that reported from other studies, concerning the use of these tests. That for the Binet confirms well-established findings regarding the predictive validity of the test for school progress in the case of European children. The findings with the Leiter scale substantiate the author's claims that is relationship with school progress is comparable to that of the Binet, and where such a scale is inappropriate (ie. in the case of deaf children) it represents a powerful alternative predictive tool.

The P.P.V.T. again fails to demonstrate any useful predictive quality in these early school grades - a serious short-coming which, as was indicated earlier, the author himself acknowledges despite the fact that it was "designed to predict school success." Recent efforts to establish its reliability as a test for Australian school beginners (Taylor, de Lacy & Nurcombe, 1972) - European and part-Aboriginal - may appear a somewhat pointless methodological exercise in view of the absence of any empirical data confirming its validity as a measure of that which it was designed to measure!

TABLE 28

Latest test scores and academic progress: part-Aboriginal children

Test	N	Chi square	Probability
Binet (Form L/M)			
Reading	34	8.601	
Arithmetic	34	6.128	
Written expression	27	6.237	
Overall adequacy	33	8.022	$p < .01$
P.P.V.T.			
Reading	34	1.462	
Arithmetic	34	1.006	
Written expression	28	3.165	
Overall adequacy	33	2.124*	ns
Leiter			
Reading	21	8.615	
Arithmetic	21	6.534	
Written expression	14	4.978	
Overall adequacy	20	7.542	$p < .01$
I.T.P.A.: A.A.			
Reading	32	0.448	
Arithmetic	32	1.369	
Written expression	25	0.210	
Overall adequacy	31	0.326	ns
I.T.P.A.: V.A.			
Reading	33	2.428	
Arithmetic	33	2.453	
Written expression	25	1.944	
Overall adequacy	32	1.914	ns

* Since there were no scores on the Peabody test falling at or above the mean of the test, the cutting point between groups was lowered to $-\frac{1}{2}$ SD. The comparable result for the Binet test and overall adequacy is $x^2 = 19.252$. This suggests that the Binet scale, if appropriate norms are available, may predict early academic progress as adequately for sub-cultural groups as it does for the majority for whom current norms are more appropriate.

TABLE 29

Contingency tables for chi square tests : latest test scores and academic progress** : part-Aboriginal children

		VW/A	P	
BINET	At mean of test and above	10	1	11
	Below test mean (- 1/4 SD & below)	7	15	22
		17	16	33
		$\chi^2 = 8.0225$		
P.P.V.T.	- ½SD from mean of test & above	7	2	9
	Below - ½SD*	10	14	24
		17	16	33
		$\chi^2 = 2.1244$		
LEITER	At mean of test and above	11	0	11
	Below mean of test	3	6	9
		14	6	20
		$\chi^2 = 7.5421$		
I.T.P.A. - A.A.	At mean of test and above	5	2	7
	Below mean of test	12	12	24
		17	14	31
		$\chi^2 = 0.3258$		
I.T.P.A. - V.A.	At mean of test and above	12	5	17
	Below mean of test	6	9	15
		18	14	32
		$\chi^2 = 1.9142$		

** VW/A = coping "well or adequately;" P = coping "poorly"

* No scores fell at mean of test or above

As only two sub-tests of the I.T.P.A. scale were employed, results cannot be said to contribute acceptable information regarding this scale. (At the same time, the lack of any significant relationship between the Auditory Association test and school progress was a little surprising. It would appear that though the process tapped by this particular sub-test may be relevant to school activities, the test norms may be quite inappropriate for this group.)

16.5 Social behaviour and progress in school

Questionnaire responses gave a general indication of the social behaviour of Aboriginal children in the school setting, on a few relevant dimensions.

Social behaviour with peers (N=36)

1) With awareness that a few Aboriginal children had been subjected to negative verbal comments on grounds of race or skin colour, teachers were asked to indicate whether interaction with peers occurred "often, sometimes" or "rarely, never." It was known that such gross categories would not catch the subtleties children's social interactions; for this, direct observation in less structured situations was needed. It was expected, however, that it would indicate any children who were socially isolated.

   Three of the 36 children thus described were seen by teachers to interact with others rarely or never. From experience in the pre-school program, the reasons are likely to differ in each case; while not originating in the school situation, it is likely that this would be experienced as exceedingly overwhelming. Although these children come from families in the least favourable social circumstances, the same problem is not reported for siblings, and there is evidence that the origin is in previous experience rather than in any negative conditions associated with Aboriginality. All three children reported to make few or no normal social contacts with peers were also categorized as in difficulty with academic work.

2) Aggressive acts were not seen to be characteristic of those under study. Three children were described as likely to act aggressively (one also making few normal social contacts). Of the remainder who had aggressive impulses under control, at least in the classroom, nine (25% of the total group) were described as acting "with thought for others." While the nature of a supervised classroom could affect the expression of hostility and of positive feelings differentially, most of those children described as thoughtful for others were acting consistently with pre-school behaviour and their mothers, themselves, expressed similar sensitivity. Aggressive v sympathetic social responses showed no relationship with adequacy of progress in basic school subjects.

3) Approximately 30 per cent (N=11) of the group at school were reported to be submissive in relationships with peers; the other end of this continuum was positive self-assertion (not aggression). Assertive relationships with peers were significantly associated with the absence of learning problems in basic academic subjects.

TABLE 30

Contingency tables for chi square tests : assertive behaviour with peers and academic progress *

	Reading			Arithmetic			Written expression		
	VW/A	P		VW/A	P		VW/A	P	
Acts submissively with peers	2	9	11	2	9	11	2	8	10
Acts assertively with peers	16	7	23	17	6	23	13	7	20
	18	16	34	19	15	34	15	15	30
	$\chi^2 = 5.9583$			$\chi^2 = 7.2503$			$\chi^2 = 3.7500$		
	$p < .02$			$p < .01$			p approaches .05		

* VW/A = coping "very well" or "adequately"; p = coping "poorly"

In a large group, the ability to compete successfully for adult attention and help, needed in order to understand work, could well be expected to affect progress, and this in turn to add to confidence in social relationships.

Social behaviour with adults

The two dimensions of interaction with adults dealt with in school questionnaires proved to be unrelated to academic progress.

1) Children who initiated contacts with the teacher, rather than responding only, constituted just over half the group. Only one child was reported to avoid interaction with the teacher.

2) Excessive attention-seeking was apparently not a problem (with 3 exceptions among those with difficulty in learning basic skills); approximately half the group sought "little" attention and half "some." Twice as many of those seeking little attention were doing "very well" or "adequately" in their school work.

16.6 Extent and nature of contact between parents and teachers in school setting

For a number of reasons, communication between parents and teachers is a matter of importance. In the case of Aboriginal families, where additional understanding of cultural and social variables is needed, some children may need additional help with learning, and some parents may have had unhappy associations with formal schooling, communication acquires particular significance.

Questionnaires to schools included one item on the nature of contact between Aboriginal parents and the teachers responsible for their children at school. All parents had been responsive to varying degrees to pre-school teachers' efforts to help with educational matters; these teachers in turn had found contact with parents an essential part of their efforts to help young children learn. Not only this but, at a personal level, teachers had enjoyed, had learned from, and had felt much concern for the Aboriginal parents whose children's development they were helping to support. It would have been impossible to plan appropriate educational experiences without some insight into their meaning for the family, beyond the pre-school program itself. Many of the points at which communication proved important were highly practical ones, but nonetheless significant in their influence on all concerned.

TABLE 31

Teachers' perceptions of part-Aboriginal parents' attitudes to their children's schools

Perceived attitude	Total N	Total %	Swan Hill N	Metrop. N
Interested, helpful	7	18.9	5	2
Interested, not helpful	2	5.4	0	2
Not interested	2	5.4	0	2
Antagonistic	0	0.0	0	0
Attitude not known	26	70.3	16	10

Note: The question was asked for mother and father separately but answers did not differentiate between parents. Where acting as guardians, grandparents were included (N = 2 families)

The small frequency of families in any contact with the school removes the possibility of a useful analysis of the nature of contacts. Of the few cases where some interaction had occurred, it was home-initiated in 7, but in only 2 referred to children's progress.

There was no indication of any continuing contact between the child's teacher and his parents, although in some schools Infant Teachers or Headmasters assumed some responsibility - in some cases protective and in others punitive. On the basis of questionnaire responses, one cannot assume that the school learning situation for these Aboriginal children was characterized by any positive influence from parent-teacher contact. Both practical problems and social/cultural restraints are likely to be operating on both sides, although the situation reported may merely represent the general one for all children. Whatever the reason, the absence of any sustained communication on children's progress and educational needs may well be one factor limiting their academic performance.

In cases where poor attendance posed a particular problem for both teacher and child, it seemed that parents needed concrete information on the consequences of this, rather than either over-protection or the judgmental tenor of threats of reports for truanting; and teachers needed information which would help in understanding reasons, not available to them where personal contacts of a positive nature had not been established.

What was exceedingly evident, even in the brief and informal contacts possible with schools to date, was an enormous variation in teachers' attitudes and reactions to Aboriginal families. These may not have been different to those evoked by similar problems in non-Aboriginal families, but some may well have been experienced by Aborigines as within the general framework of social rejection. Whatever the case, it was clear, even in the briefest contacts, that professional qualifications did not rule out wide extremes in teacher attitudes - from critical rejection of Aboriginal children and parents on grounds purely of "the rules of the school system" and disinterest in any other viewpoint, to supportive and concerned attitudes. What was not evident at either extreme, however, was some practical and constructive plan of action for dealing with reported difficulties. This would probably have required additional resources, and time which neither teacher nor parent could have found easily. Never-the-less, some increased thoughtful interaction between Aboriginal families and the teachers working with their children would seem a necessary area of future effort. To be helpful, however, something far more thoughtful than just increasing opportunities for interaction would be needed. Preparation which would increase understanding and set positive expectations on both sides could be undertaken at both a general and a local level, and efforts made to establish positive personal communication before trying to deal with matters of education.

SECTION VIII: GUIDELINES FOR PLANNING AND ACTION

A project such as this has certain potential contributions and limitations. It can, perhaps, help to define objectives and priorities in educational work, and add something to understanding of the origins of educational problems. Possibly, too, it can help to indicate some of the characteristics which a successful plan for supportive help is likely to need. When it comes, however, to devising action on field work, this project is not in a position to make specific recommendations.

Although the range of problems experienced by families participating may have been representative of the scene in Victoria, contacts in this project were of necessity limited. Further, it is considered that decisions on field work in any locality should be made as part of a comprehensive approach, which involves definition of work in other professional fields, local needs, and Aborigines themselves.

At the outset of this project, the opportunity existed to participate more directly in the development of field work in this State. The appointment by the Victorian Ministry of Aboriginal Affairs of its own pre-school advisors has changed the nature of the contribution which has been possible or expected.

The following suggested directions for effort are presented as guidelines for planning,and for thinking out the nature of useful action; also as a basis for considering what responsibilities pre-school teachers may have to Aboriginal families. These recommendations are accompanied by explanatory notes; the first group relates to the general approach which appears to be needed to educational problems; further suggestions deal more specifically with issues of concern to pre-school teachers.

Recalling the purpose to which suggestions are directed, the basic concern is that of the increased functional independence and social equality of Aboriginal Australians who wish to participate successfully in the general Australian community. Educational progress is seen as a step which it is agreed is necessary in achieving this goal. It is sometimes referred to as a "method" by which cultural independence might be pursued.

But the use of the word "method" here, rather than prerequisite or intermediate goal, can trap us, as non-Aborigines, into thinking that the question of how to facilitate such change has been dealt with. Only the nature of the effort which Aborigines might make has been specified. What is not specified are the methods of support by which white society might help them pursue independence.

It seems necessary to draw a distinction between adopting the general premise of a relationship between "better" education and Aboriginal independence, and making a sequential plan of action through which Aboriginal people can be assisted over time to make the educational changes needed to allow such independence. Questions need to be raised as to what kinds of learning must occur in order to reduce existing difficulties for Aborigines in urban situations. Under what conditions is it appropriate to be making plans and recommendations for their education at all? If methods of providing educational help are equated with funding earlier or longer attendance in planned education programs, the basic problem may be side-stepped altogether. Consequently, it is to these other questions that the following working notes direct attention.

Since the responsibility undertaken by the University project staff was that of a pre-school education project, the results of this exploratory study are presented from that viewpoint. It is hoped, however, that their relationship to other areas of responsibility, and to other approaches to the overall situation will be evident from this report.

Chapter 17 A GENERAL APPROACH TO EDUCATIONAL CHANGE

17.1 The basic problem and its links with pre-school education

Whether or not one starts with the preventive concerns of regular pre-school centres or the remedial concerns of educational intervention studies, attention is attracted eventually to children's learning experiences at home. One finds that some home environments may be lacking certain ingredients which give children necessary educational support.

The response from an intervention framework has been to develop parent education programs, which instruct parents in ways of helping children with learning which is basic to academic work at school. In this way, it is hoped to influence significant elements of children's home environments in educationally positive directions.

Studies taking this approach have not, however, dealt with the question as to why it is that parents of children in educational difficulty have not created home conditions more positive for children's development? The nature of programs assumes that interest, motivation, information and demonstration - plus some simple teaching materials - are the missing elements. In other words, problems are seen to originate within the parents themselves, or at least be within their control to modify, through conscious effort. One might also wonder if what has not been learned by children is most successfully rectified by making parents conscious of this, and helping them take an instructional approach with children.

These underlying premises for planning educational work with such families are thrown into question by data from this and other projects (e.g. Gordon, 1971). If one studies the family situations of children referred to by the majority culture as "culturally disadvantaged", one finds that many parents' environments are no less adverse to learning and behavioural change. Negative influences in their physical and social setting, and those accumulated from previous experience, are preventing many parents from learning from informal opportunities, and from profiting in any lasting way from planned education programs.

To try to rectify the difficulty for children by having teachers attempt to teach parents child-rearing skills, considered more adequate, fails to recognize that an even more negative set of factors is preventing adult learning - or acting on the results of learning - too. In addition, it ignores the fact that relationships between parents and children who have grown up under conditions of social deprivation may not be conducive to positive informal learning or to educational communication.

The most obvious source of educational problems has little to do with formal learning, in the home or elsewhere. There is an absence of basic conditions needed to support general development, and to make learning at a conscious level, or planned help with this, possible. In this project, trying to create and maintain such basic conditions for learning has consumed our major time and effort. In many families, it has been impossible from within the pre-school program to create or sustain them.

Work towards ensuring such prerequisites to educational change cuts across departmental responsibilities in health, education and social welfare, since matters of timing and priorities are involved, and the educational nature of supportive procedures.

> Recommendation 1: It is suggested that future action in support of educational progress is directed, initially, to creating conditions in which educational processes may operate.
>
> (This is in contrast to intensified instruction which presupposes conditions under which development and learning can occur and be sustained.)

17.2 Priorities in creating conditions conducive to cognitive progress

There are limits to which one may try to influence family life, particularly that of families who identify with another cultural group. In concern about conditions affecting Aboriginal education, it seems important to look first at contributing factors for which non-Aborigines have direct responsibility.

Other reports have drawn attention to the continued existence of prejudice and discrimination in Australia. This project could add to examples, and would support concern with the re-education of the white community, and preventive action with children, in this respect. Field work experience in this project, however, also indicates an urgent need to re-consider more familiar ways of organizing and using supportive resources, so that their potential value for others is preserved. Illustrations from field work suggest that the key to progress does not lie in just increasing material help or educational facilities; but in the extent to which resources and energies are used in ways which express to others understanding of human needs, and which apply what is known about positive conditions for learning. What additional human resources might be brought to bear on human problems?

Much has been said about what should be changed; little about what accomplishing this demands from people. In order to avoid either a hand-out situation or a withholding (in case this encourages dependence) of support which is needed for dealing with problems, it would seem that educational ingredients need to be built in to the manner in which resources are used. It is the relationship, at any one time, between environmental support and physical and psychological factors within individuals which makes for opportunities to intersect the vicious circle between depressed home conditions and limited education.

Increased emphases in administrative procedures in the following directions would help greatly in creating such a relationship.

> Recommendation 2: In order to help establish and maintain conditions in which families can make educational changes, procedures for administering support would seem to need to allow:
>
> a. the differentiation of centralized and local responsibilities
>
> b. the planning and coordination of programs of support which deal with the problems experienced by Aborigines, rather than programs conceived round the usual responsibilities of separate Government Departments or professional fields of work (e.g. health, housing, education, welfare)

Unless the principles of local freedom of action (within general policies), differential use of funds according to family needs, and confidentiality in administering resources on individual bases, come to be accepted, it is hard to see how the "hand-out" problem and its negative effects on education and independence can be overcome, without withholding support needed if the situation is to be improved - even for the next generation.

It should be noted, however, that not all the support needed is material; only those engaged in work at the local level can give, easily, the human (but objective) encouragement and concern perhaps not yet expressed by, or accepted from, the wider community. Such a local work force is needed, too, for sufficiently regular and accepted contact with communities and families to be conversant with their changing needs, and to be available sufficiently readily to help forestall family crises, if this is at all possible.

Probably one of the most major tasks ahead is trying to conceptualize supportive work from the viewpoint of those in need of assistance. To identify the aspects of learning in persons which do help them toward independent functioning, without requiring behavioural conformity, further study may be needed. Much work, also, is needed to define interdisciplinary relationships within some coordinated plan of action, related to the current experience of a family. This last task should not be underestimated. What is urgent is not just increased exchange of information between people engaged in different programs, or more written reports to be circulated. Action decisions need to reflect increased awareness of the multiple dimensions of a problem, and some commonly accepted priorities must be arrived at, if resources are to be used with optimum effectiveness.

17.3 Emphases in educational work with parents

Parent "involvement" is commonly agreed to be of primary importance in early education programs. This project, however, has raised some questions about the nature of involvement which might be possible and useful, in relation to existing problems for children, and parents.

Two trends have been evident in work in other projects to date. In some cases, parents are involved in planning and organizing group experiences for pre-school children, and in taking responsibility for creating the necessary facilities. Attention is directed to children's interests and needs as they can be observed in play situations, and to ways in which parents might help them learn from these. In other cases, parents are "involved" in situations with their own children, taking a more direct teaching role. This is thought to help with children's language and concept development.

There are variations on these themes, but the educational task which both present to parents is one of more conscious attention to child-rearing responsibilities and interests.

Neither of these approaches appears relevant to the most urgent needs of children in this project who were in educational difficulty. In families where this occurred, it was evident that parents had serious problems in exercising sufficient control over their own lives and home management responsibilities to create, in the home, conditions which allowed children to think and to learn. In other homes this was not the situation, but here children's development was much closer to levels which have come to be expected.

With a view, then, to helping parents arrive at a position from which they can make home conditions more likely to sustain educational effort, this project suggests a change of objectives in work with parents. Rather than focusing on the acquisition of knowledge and techniques directly concerned with child-rearing, one might need to be concerned with how to help parents to extend their own cognitive skills and general knowledge to the point where they can deal, with less strain, with the usual parental responsibilities. In this way, parents may also experience the meaning of education for a person's life - in the sense that they can act in the present with more awareness, knowledge, and understanding of the consequences for themselves and others.

The whole idea of causal relationships, and the possibility of influencing events to some degree appears to be outside the experience of some families. If conditions needed for adult learning (as previously discussed) are present, help can be given with thinking - with reflecting on and learning from personal experience; with obtaining information and using resources relevant to some immediate goal; with anticipating possible results and seeking evidence of actual results; with relating the appropriate pieces of events. These, and other cognitive skills are necessary assets in situations requiring one to take individual responsibilities.

Once a degree of control is established, it is much more realistic - but likely to be much less necessary - to direct attention to children's needs and interests. Home conditions helpful to children's development are more likely to exist automatically, and parents will be in a better position to stimulate, spontaneously, similar cognitive skills in children. Intrinsic reinforcement for cognitive effort may then be experienced and actively sustain further learning. There are then, perhaps, steps which need to precede (and might possibly replace) learning more about child-rearing, which are challenging educational objectives for either those learning or helping others learn. It is likely that some help has already been given with these, as part of the work of many people in contact with Aboriginal families with multiple problems. How it might be best to approach such a task is an area, it would seem, for much more thought. The notes in the following section suggest some of the points which it may be important to keep in mind, in any work towards these objectives. Such objectives are in line with some world-wide interests in helping individuals increase the degree of responsibility which they assume - and are able to assume - for the state of affairs in family and community, and for determining the course of their own lives, within the limits to freedom set by the need to preserve that of others.

> Recommendation 3: While a differential approach is needed to educational work with families, according to varying positions of stability and independence, it is suggested that primary concern is given to whether parents have some sense of mastery over their own lives and practical work loads, and some appropriate source of help in trying to acquire the necessary cognitive skills and knowledge.

When a position of ordinary control over everyday events has been arrived at, it may be helpful to take up some child-rearing issues more directly. The emphasis at this point might, however, appropriately be placed on cultural freedom to give thought to what Aboriginal parents may want their children to be learning, and how this might be achieved. To the extent that non-Aborigines can help with such learning and are invited to do so, further joint activities might be developed.

Notes:

1) It may be that there are limits to which parents can make up for earlier educational problems. One can hardly stress the importance of early learning and ignore this possibility. It is held, however, that it is not known at present what is possible here, since positive conditions for adult learning are frequently lacking for families at present. Most importantly, too, there is a need to respond to the awareness which has been created in parents of not understanding how to deal with the community in which they are living. Regardless of the extent of change possible, there is a need to communicate awareness of and concern for their experience, and to provide opportunities for self-initiated learning.

2) The position can be taken that Aboriginal families, re-housed according to the social organization of the white community, are now placed in the position of having to learn skills and to accept responsibilities as individuals which are foreign to Aboriginal life styles and concern with community living, and that this degree of "Westernization" is unjustified.

The wider issues here are beyond the responsibilities which this project was in a position to assume, although it has some common concerns. The point which it can and needs to make, however, is that if Aborigines are faced with certain situations, by virtue of changes for which they are not primarily responsible, one may not fairly hold them responsible for the consequences, in terms of any apparent failure to meet "obligations." There is, instead, the obligation to help them deal with the resulting experience, and to recognize its interrelated facets. Any thought that re-housing of itself necessarily contributes to health, education, or even general well-being needs careful examination. Approaching "housing" as a primary and separate problem may lead to future difficulties.

3) In respect to the previous point, it seems most necessary to clarify the meaning of "independence" for Aborigines, in any one discussion.

Some current policies and activities appear to contribute to independence in the sense of learning not to seek help or concessions from Government and general community. Alternatively, independence to some means freedom to do whatever one wants to, or can. In this context, Aborigines may prefer to exercise their cultural rights to remove themselves from situations and "responsibilities" which have not been self-determined and conflict with established patterns of behaviour and values. If so, the work suggested for adult education would not be needed.

For this project, "independence" was taken to mean learning how to cope with one's immediate situation so that help and concessions from others are increasingly less needed, not just less sought. If participation in the wider community is a goal for Aborigines, this educational experience appears to be necessary, even in order to protect self-respect and create some sense of security and confidence. Although academic skills and knowledge of a scientific nature are important elements, schooling does not deal with the set of conditions which allow these skills either to be learned or used.

Since unidentified differences in purpose lead to confusion and conflicting priorities in planning, and have decided effects on action decisions, it appears to be necessary to deal quite openly with the nature of independence to which effort is to be directed. Lack of clarity and general agreement here (at a functional level) make it not only very difficult to progress with educational work; they make it quite unclear as to whether certain educational help should be the focus of planning at all.

In this situation, this project has erred on the side of valuing the ability to bring thought and knowledge to bear on one's own situation, and to be less at the mercy of external pressures, in whatever social group one is living.

17.4 Creating opportunities for educational interaction between adults

In thinking about ways of approaching educational work with Aboriginal parents, recognition is needed for the idea that learning and teaching are matters of human communication and experience; and that these are not dependent on - may even be hampered by - the development of special activities, observable programs, courses, or facilities, in which learning is expected to occur at pre-determined times.

Planned "parent education" programs, which publicly draw attention to the educational differences they are concerned to reduce, may just make those who might wish to learn feel even more inadequate. Informal communication and help in thinking, at a personal level, may be more appropriate.

In the normal course of events, opportunities for learning from informal sources tend to arise naturally, in interaction with neighbours or friends. In the case of Aboriginal families, some planning may be needed to create such opportunities. First, social interaction in their case may be more limited to those with similar cognitive characteristics; establishing communication beyond this group may take time and much understanding. Then, the nature of interaction occurring must not only extend, where possible, existing abilities, but also counteract earlier learning where this has had negative outcomes. Further, the nature of problems to which thought needs to be directed usually requires communication which must be treated as strictly confidential. Objectivity is also necessary in the persons able to offer educational support.

Although the above requirements suggest that some preparatory training is likely to be necessary, a variety of people might make contributions to educational work of this kind. Assistance from both men and women probably needs to be available.

Gaining some degree of mastery over one's personal situation, and some understanding of how one's behaviour may affect the experience of children, is a task largely independent of the content of specific problems. It can, therefore, be pursued in the context of an issue of immediate concern to parents. Whether the content of the problem relates to health, education, or social welfare, the process of dealing with it can be an educational one. The initiative in managing personal affairs can be retained, and ability to do so increased.

When there has been opportunity for parents to develop certain patterns of thinking in the context of their most immediate concerns, help in generalizing them to child-rearing issues can be made available, if still necessary.

> Recommendation 4: In order to provide some of the prerequisite conditions for learning, and also effective educational help, the following should be considered important in work with Aboriginal (or other) parents, towards the goals suggested:
>
> 1) sustained personal communication between families and someone able to play an educational role, at a personal rather than official level(in respect to adult education)
>
> 2) the opportunity within such contact -
>
>   a. for parents to initiate moves towards obtaining help in dealing with problems
>
>   b. for others to communicate information which helps to identify possible goals, and increases awareness of why it may be important to think about these.

There is much, it seems, to think out here. While the nature of contact may best be informal, the nature of teaching help needed is specific to certain cognitive skills, and may not occur without awareness on both sides. Levels of ability reached by parents, however, are far less crucial here than the feeling of personal involvement and increased confidence in dealing with experience, and being aware of some immediate, positive outcome which underlines the possible contributions of education to daily life.

The purpose of immediate effort does, though, need to be kept clear. Contacts over pre-school children's needs and progress have some advantages, as a basis for developing the nature of parent work suggested.* The educational role to be played with parents should not be confused with that of taking a consultant role, or a teaching role, in the development of facilities or programs for pre-school children. If parents' energies and thoughts are focused on these, it may just cover up the relationship between home situations and children's development, convey misleading information about what is involved in solving Aboriginal children's educational problems, and suggest that it is learning related to child-rearing which is the main issue.

It is possible to create awareness of the need to take some joint action on behalf of children, while parents are temporarily over-burdened with their own problems, without implying that this reflects negatively on parents. This effort can also be seen as a means of supporting the usual parental roles, rather than an alternative to planned education programs, which build on to positive home experience a group learning experience with peers.

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* If both responsibilities are to be assumed by one person, this requires appropriate preparation, official sanction, and adequate time in a program of work. Although, initially, only one may be operative, there comes a point in relationships when the adult learning situation can, perhaps, be identified and accepted on the basis of experienced previously shared.

There are likely, however, to be many different ways of introducing educational help of this kind into everyday activities. Understanding of local situations is necessary for decisions here.

Whatever the way selected, success is likely to depend heavily on a reduction in adverse influences in parents' learning environments.

17.5 Aboriginal / white communication on education

There is an important task to be faced in discussions with Aboriginal leaders on educational plans. It illustrates how some of the real work for education may, inadvertently, be missed.

In order to recognize the right which Aborigines have to self-determination, the emphasis is now on their assuming control of decisions about what activities should be planned or funded. This has become, for some, a goal in itself. When the activities in question are matters of preferred ways of living, the stress on cultural freedom creates no problem. When, however, the activities in mind are thought to be ways of learning intellectual skills, needed for more equal participation in the majority culture, the issue is rather different. These are not behaviours which might be learned by trial and error, by having freedom to learn from one's mistakes. They can only be learned in interaction with others who have previously had opportunity to acquire them, and who are aware of what might be learned.

When discussions on pre-school education, for instance, start with the practical matter of what activities or programs should be organized, there is no chance to think together about different varieties of learning and why these may matter in the present situation, or to share knowledge and experience concerning learning and teaching. Decisions tend to be made on the basis of preferred activities - what people want, or may be assisted, to "do". In this framework, non-Aborigines can only give advice, at a behavioural level. If such advice is offered without being requested, it perpetuates a paternalistic position which may well evoke resistance, being felt as an attempt to control Aboriginal activities. If advice is withheld, educational problems may not be dealt with and paternalism may just change hands.

Achieving an educational, rather than organizational, framework for discussing education presents problems even in the general community. But the task can be identified and a start made.

> Recommendation 5: In discussion with Aborigines, on plans for education meant to reduce existing discrepancies, an effort may need to be made to talk in a framework which allows activities to be seen as teaching tools, related to given goals. (The present tendency to focus on who should decide activities and run programs prevents discussion of educational questions and the sharing of what understanding of these we have. It is not the knowledge exchanged which is the main point here, but the process of thinking out something together - a matter to be distinguished from just expressing opinions.)

Chapter 18 TEACHING ACTIVITIES WITH ABORIGINAL CHILDREN IN RELATION TO PRE-SCHOOL CENTRES IN VICTORIA

Problems reported in field work do throw into question the usefulness of giving priority to work with pre-school children of Aboriginal families, at this point in time. Apart from the practical problem of developing sufficiently sustained contact with those in most urgent need of educational support, it seems that special help would need to be sustained, as long as existing conditions remain. This is borne out by information on the response to school work of children progressing, from a retarded start, in our own programs.

For this reason, it seems a practical necessity to focus major educational effort on dealing with the origins of educational problems, rather than their symptoms in children's levels of cognitive development. While a circular relationship here is recognized, and theoretically, changes in either should have positive outcomes, there are priorities on practical grounds for both teacher and learner, in accomplishing change.

Concern with prerequisite conditions which make cognitive progress possible should not, however, be taken to mean a stress on environmental change alone, nor on parents rather than children. It requires dealing with concurrent external influences and related internal states and behaviours of both. Setting these priorities might more appropriately be activated at present out of concern for human experience, rather than an interest in selected cognitive gains - even with the consequences of these for the individual in mind.

In this project, it has been found entirely possible to establish accepted pre-school education programs with Aboriginal families, and to extend enrolment to non-Aboriginal families or introduce children to regular pre-school centres, at the wish of Aborigines themselves. This result should not be confused, however, with the question of what such programs contribute to the solution of an overall problem.

Having set this context for thinking, it needs to be stated immediately that it is still considered most important to maintain whatever contact is possible with pre-school children and their parents.

For one thing, we have no evidence that gains made during any teaching sessions possible are not sustained, and some clues that they are. This is quite a different matter than whether further cognitive learning proceeds at a more normal rate. Any gains seem worthwhile. In addition, positive change in the problems of families and the community's response to these may take time; this makes it important to plan some compensatory measures for children's general well-being. Requirements for physical and mental health must still be met, regardless of educational progress, and pre-school teachers normally carry some preventive responsibilities here. Also, children themselves may have developed patterns of behaviour which contribute to general stress at home; some opportunities for re-learning may bring about a state of affairs more helpful to cognitive development.

In those families where pre-school children are not in educational difficulty, in respect to general expectations, supportive interest in their development may be all the special help needed; but this, too, seems important to express and sustain, in view of the past experience of many Aboriginal parents - both socially and educationally - and the apparent social isolation of a number of Aboriginal families in the wider community.

At present, then, a major reason for maintaining contact between a pre-school teacher and Aboriginal families is just because of the positive personal contact which can grow out of joint interest in young children's progress, and the fact that establishing communication with parents may take time and special thought. Such contact creates one of the few bridges operative at present across differences in experience and cultural barriers. In the long run, positive interaction on grounds of mutual respect and interest, with built-in opportunities for informal learning, may make the strongest contribution to change. This kind of communication does not develop, however, in the relatively superficial, more passing (though good-natured) contacts which tend to occur in groups and in organized situations, carrying official labels.

It is important for pre-school education that the purposes of work at any one time are differentiated clearly, so that both parents and teachers are aware of what they are doing, and of why they are making certain practical arrangements; and, particularly of how these purposes relate to other community activities which involve pre-school children and their parents. This helps to ensure both accurate information about community services and some realistic basis for seeing what has been achieved to date, in a possible sequence of work.

At present, it is difficult to know under what administrative arrangements any such pre-school work could be funded or best undertaken. As with other guidelines, however, some tentative recommendations can be made, on the basis of experience to date, about the nature of work which might be useful, and how it might be approached.

18.1 A suggested starting point for thinking for pre-school teachers

Previous sections of this report have drawn attention to the range of differences between families of Aboriginal descent in this State; also to the varying aspects of learning in children which their past experience has allowed them to acquire. On either educational or practical grounds, the task of planning work with children cannot be approached usefully with a fixed set of activities in mind.

The generally-accepted concept of pre-school education as "attendance at a pre-school centre" needs some re-structuring, in order to deal with a wider range of educational needs than usually met in regular pre-school centres, and to recognize some serious cultural responsibilities. Teaching activities need to be related to some explicit objectives, the value of which for Aboriginal children can be discussed by Aboriginal parents. This approach is also needed in order to generalize, to quite unfamiliar situations, teaching procedures and educational principles found, over the years, to be important in planned programs for young children, regardless of the particular aspects of learning to which priority is given. For example, the principle that a pre-school program should be evolved from study of the needs of the particular families participating and on the previous learning of the children enrolled may mean, in some cases, that the immediate relevance of peer-group experience for children, and contact with an established pre-school centre for parents, may be an inappropriate and quite unrealistic starting point. It is dangerously easy to hide educational problems under patterns of institutionalized behaviour. Teaching experience in this project, in relation to current trends in policy, leaves one with a good deal of concern that children's readiness to profit from enrolment in a group learning situation will be judged mainly on grounds of social confidence, overlooking prerequisite cognitive progress, not so easily observed or defined.

This comment should not be taken to mean that regular pre-school centres have set expectations to which children must conform; rather, quite the opposite is true. Teachers try to design activities relevant to children's levels of development. The group situation does, however, make certain demands on those participating and individuals' previous development is usually a consideration in enrolment.

For non-Aboriginal teachers interested in educational work with Aboriginal families, it is suggested that the initial question for thought might be:

> "In what circumstances is it appropriate for non-Aborigines to be involved in the education of Aboriginal children?"

Within the limits which are set in answering this question - and these exist for part-Aboriginal children as well as those living a more traditional life - one may then need to ask:

> "What educational help can pre-school teachers bring, to the work of enabling Aboriginal families - at varying stages of stability and independence - to create and maintain conditions needed to support children's cognitive and general development?"

rather than

> "What provision should be made for pre-schooling?" - in the sense of facilities such as pre-school centres, or of group activities in some institutionalized program - whether this is "run" by Aborigines or non-Aborigines, parents or teachers.

There seems a need to create the type of working contact between pre-school teachers and Aboriginal parents which leaves activities open to joint planning, and to modification according to widely differing cultural positions, practical circumstances, and the changing degree and nature of personal and educational support needed in any one family, over time.

At present, it would seem more helpful if pre-school activities with Aboriginal children could be introduced as part of some comprehensive approach to helping Aboriginal families with multiple problems, rather than initiated separately, from within the field of pre-school education. This is a matter of priorities and timing with any one family or locality, one of coordination of local support. Professional freedom is needed concerning the educational content of work with children and parents, however; and the collaboration needed at local levels is not something which can be achieved by administrative decisions, or necessarily by subsuming pre-school activities under the general label of "Aboriginal".

Pre-school teachers might, perhaps, be participants in small, local planning groups, in a position to understand the immediate problems of particular families and to plan a possible sequence of field work, in consultation with those families and others in the community - and within general Government policies concerning the objectives for which funds are available. Professional leadership and official sanction would probably be needed for such a working group, and relaxed and positive personal relationships with Aboriginal families essential. More than one or two special appointments might not, however, be needed. Support which allowed persons already playing roles in the community (and with understanding of Aboriginal needs in relation to the community as a whole) to be sufficiently free from existing responsibilities to give time to this work, might be one appropriate plan. This may work better than imposing some obvious additional structure.

A regular pre-school centre could serve as one possible base from which a teacher might, if appointed to do so, engage in such cooperative activity. It may, however, be important that the employing body is such that she is independent of local pressures, whether pre-school or Aboriginal.

If such a cooperative structure for pre-school work is not possible, experienced teachers, familiar with local situations, could still develop contacts with Aboriginal families which would serve a variety of needs. In this case, however, a much more general role would need to be filled, in our experience. If a teacher is not to carry an impossible load of awareness and work, this expanded role (which occurs just by virtue of contact) needs official recognition, so that the support and resources, and professional contacts needed to make it feasible,can be arranged.

18.2 Pre-school centres and the needs of Aboriginal children and parents

It is considered that funds are needed on a non-racial basis, to allow the development of pre-school programs relevant to the needs of all Australian families, including Aboriginal; also for continuing study of what these needs are, and how they may be changing, over time.

From the viewpoint of planning, a distinction needs to be made between seeking funds for:

1) an emergency program which substitutes for some of the usual home and parental contributions to children's early learning

or for:

2) a supplementary community service which extends positive home conditions, in ways which are valued by parents and children and which cannot usually be provided, even in privileged home situations.

In the first case, one plans towards decreasing needs, at least for the same families or areas.(The programs of this project at present fit this temporary category, although "temporary" in relation to Aboriginal field work serves more to keep clear the purpose of effort and the major task; it may be unrealistic to expect an early reduction in the need for support.)

In the second case, the wider development of facilities is appropriate as a general service, although there are obvious limits to the planned education programs which a community can afford.

The relative urgency of providing funds for supportive educational services, to families rearing children in adverse conditions, as against the need for funds for extending general pre-school services, is not quite such a clear-cut question as arguments for "equality of opportunity" infer. In the first instance, there are certainly responsibilities to help children meet the general expectations to which they are likely to be subjected. In the second case, it needs to be recognized that educational progress itself creates other needs, and other than educational expectations must also be met.

If, for example, there are insufficient outlets for learned skills, abilities, and understandings, and if the environment does not provide the level of stimulation to which individuals have adapted, new problems arise. In this case too, there can be considerable stress for families, individuals, and communities. Maintaining a balance between person and environment is a task of continuing importance and challenge, regardless of educational levels. Mental health issues, as well as social and educational ones, would seem to be very much involved. There have been many efforts over the years, from those concerned with a human development approach to education, to indicate the problems which arise for people when action is taken on one aspect of their needs, without concern for its effects on others. Still, however, there seems to be little progress in recognizing the issue at a practical level. We have not created a person-based action framework.

The following notes are concerned with the question of how much regular pre-school centres can, or should, carry responsibility for the needs of young Aboriginal children, in the present situation. Leaving aside for the moment any cultural questions relating to the content of learning, what are the educational issues, and the cultural questions affecting the way in which one might work - or be able to work - with Aboriginal families?

The first matter to be considered is: how does a program in which Aboriginal parents are participating relate to parental responsibilities? Is it planned to help parents in difficult family circumstances to carry parental responsibilities which the family, eventually, will need to assume, in order to meet community expectations and to arrive at the usual degree of independence? or is it one which needs to develop in some more continuing way, as an adjunct to homes which give children a positive educational start? In the case of Aboriginal families, a pre-school group might, perhaps, be viewed more as an aspect of extended family living, than as a separate addition in the form of a community service. The point in question is, however, not so much how it is viewed, but what purpose it serves and who is carrying the work load for meeting certain responsibilities to children? Unless some working agreement as to the direction of effort is arrived at, compensatory help for children, introduced in emergency situations, may merely extend family dependency, and develop self-perpetuating programs on bases which prevent them, perhaps, from meeting future needs.

In order to avoid this problem, it seems necessary, in planning and funding, to define "program" as a program of work towards specified purposes, rather than a program of activities occurring in a certain place, with certain people. The responsibilities assumed need to be clear to all involved.

Pre-school centres have, in the past, carried both compensatory and supplementary roles. These are still both operative to varying degrees, with different families. There are, however, some limits and advantages in family or peer-group situations which are not entirely interchangeable in their educational value. Since pre-school centres exist because children, too, regardless of cultural identity, have rights which need to be considered, it seems reasonable to set some limits to how the role of pre-school centres is automatically adjusted, in response to changes in preferred patterns of social organization, adult behaviour and attitudes, and other developments in the community.

Relationships between the work of regular pre-school centres and the educational needs of Aboriginal children are considered, here, with these thoughts in mind.

Pre-school centres and compensatory support *

Children from Aboriginal families in educational difficulty have been found, in this project, to have two main kinds of compensatory needs. One set relates to basic conditions for human development; the other to help with specific areas of learning which are largely dependent on adult-child interaction.

To what extent can these special needs be provided for within the usual kind of subsidized pre-school centre in Victoria? This is quite a different question from that of whether Aboriginal children and parents can be incorporated, happily, into the activities of such centres.

As mentioned earlier in the working notes on pre-school education, pre-school centres are concerned with creating and maintaining those conditions which motivate and reinforce general development and educational processes. One might reasonably think, then, that attendance at a pre-school centre could automatically provide for any children's compensatory needs. (The question here is one of what it is possible to provide; it is not assumed that all children from all families in all areas will need all forms of special support.)

A few of the basic conditions needed can be met in a common form, across individuals. For some children, the space, fresh air and sun, constructive outlets for energy, and encouraging interest and concern of an adult who has time to listen, are needed very much. Maintaining other positive conditions requires, however, that the teacher adapt the setting to what the children bring to the group. Usually, it is possible to adjust, sufficiently, the equipment provided, to maintain suitable opportunities for the development of physical skills. This (with its relationship to general feelings of confidence and well-being) also fills an important need.

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* "Compensation"is used here in a different sense than that of trying to accelerate certain learning by direct and intensive instructional methods. It is not inferred that there is something wrong with persons. One seeks ways of reducing or counteracting the negative influences which operate, it appears, to retard self-motivated learning. Expectations of children may be temporarily adjusted, to allow continued progress, without losing sight of some minimal goals which may need to be pursued with urgency.

Whether the above elements of pre-school centres are called on to substitute for inadequate conditions elsewhere, or to maintain positive ones in support of new learning, is not, then, a major problem. Whether or not they can serve a purpose for the Aboriginal children in question is dependent, however, on whether other basic prerequisites to progress can be maintained. Faced with the kind of major educational retardation reported for some children in this project, some very much more gross adjustments to the usual group setting would be needed.

Before taking this discussion further, it should be re-stated that the "retardation" under review is relative to the requirements of life in the wider Australian community; also that the levels of learning under discussion are not characteristic of Aboriginal children in general. They do occur, however, sufficiently frequently to warrant special planning.

Some of the difficulties of compensatory teaching efforts in the group setting were noted earlier in this report. Levels of sensory stimulation, appropriate to other children, work actively against attempts to reverse patterns of impulsive responding and of poor concentration which are affecting the chances of cognitive development. These are not necessarily evident in vigorous physical activity. In addition, the attractiveness of visual stimuli provided in a pre-school group competes successfully against the indirect nature of auditory ones which, in the midst of group activity, are much more diffuse. This does little to help establish or strengthen listening skills, further reduced for some by varying degrees of ear infection. On auditory acuity, however, much educational communication depends.

Further, the limits to behaviour needed for the safe and enjoyable functioning of any pre-school group have been found too far removed from the experience of some children to deal with, initially, in this situation. This has held true for groups smaller in number than those usually subsidized. This is not just a control problem. While teaching energies must go in enforcing, externally, these safeguards for the group, adult-child communication and time needed for other learning suffers. Difficulties here are increased by severely inadequate communicskills; and some children have acquired patterns of ignoring verbal requests, since these tend, in their experience, not to be followed with effective action.

There are, too, other areas for thought. Attendance in a relatively large peer-group, without some comparable experiential basis for contact, and without having yet developed expressive language to any effective degree, may have more negative effects on self-concepts than positive ones on the acquisition of more similar abilities. If the group is largely non-Aboriginal, early attitudes to peers have particular two-way significance. Any discrepancies in physical care or basic hygiene may further work against ensuring positive self-concepts in this wider social group. In the face of uncertainty or feelings, seemingly, of unfamiliarity or verbal frustration, Aboriginal children have been observed to seek, consistently, the company of relatives or Aboriginal friends; the employment of Aboriginal assistants in pre-school centres, which may have certain other advantages (particularly, perhaps for adults), offers another possible retreat from verbal communication and other learning tasks. Opportunities for learning may inadvertently be removed, rather than presented at an appropriate level.

When it comes to providing an effective substitute for the early parental stimulation of symbolic processes, which children in other home circumstances receive, the pre-school group setting can offer only limited help. Intensive, personal contact with the same adult, over a period, in interaction situations where invitations to physical activity are few, have been found necessary, in this study, before there is evidence of learning. In the general group, language models - though available - lose their salience; the setting itself may lack meaning, in terms of children's previous experience and, if so, it is even harder to make up lost ground,since motivation for communication is reduced.

Although there is considerable intellectual stimulation in a pre-school group, children may escape responding to any cognitive challenges. This kind of avoidance pattern can carry over from session to session. The presence of sources of stimulation - in either equipment or persons - is not sufficient. Someone must take time and be able to arouse, wait for, and react to an active, aware response. Only then is assimilation (in Piaget's terms) likely to occur. In pre-school groups, however, teachers seem more able to control their own evoking stimuli than to influence children's reactions to these, or to see what consequences follow. Something else claims the teacher's attention.

Teacher-child contact, rather than group attendance

Observations indicate that,much of the time, such outcomes as those noted above occur without the awareness of even the most observant and active of teachers, until some established patterns of behaviour become more noticeable in the midst of many demands on her attention. Some teaching techniques used may make this more likely. The fairly common practice in pre-school centres of "giving children time" to produce desired responses spontaneously is helpful when the absence of these is due to affective, motivational factors; it is not at all helpful, however, when the problem is one of unlearned prerequisite elements of behaviour which are needed before such a response can occur.

Informal discussion with teachers who have cooperated with project staff, in their liason work with pre-school centres, indicates that they may look for progress in Aboriginal children as a matter of extended first-hand experience - the range of activities which children have tried, and the related social participation. When a basic difficulty is that of an accumulation of unlabelled, poorly recalled, and unclassified experience, further sensory intake is not necessarily a priority, although the situation of a pre-school group forces attention in that direction.

Unless there is a direct effort to work at and evaluate progress with these specific areas of learning difficulty, the problems of attempting a compensatory program in such a group situation may not be apparent at all. The issues discussed here may have an all-too-familiar ring, and be dismissed as part of the usual responsibilities of a pre-school teacher. This is quite misleading. Although areas of difficulty may be familiar, the levels of functioning are very different; and the initial acquisition of abilities and behaviours is a very different learning task than that of their maintenance and generalization. Although problems may not be causing excessive disturbance in the group, or reflect in any way on its suitability for children at a different point in development, differences in performance are far greater than would be noticed unless some definite teaching effort is attempted.

Children, then, may be enjoying the play materials and company which pre-school centres provide - and this has its own value. But this may be misleading, in educational terms. They may be making little progress with some very basic, and not easily observable, aspects of learning which have escaped attention. A teacher seriously trying to facilitate these may have excessive problems to contend with in a group setting. The consistent reinforcement schedules needed to build new learning behaviours are almost impossible to maintain in a group of 25 - 30 children, and the social approval of peers for some existing behaviours, which are blocking development, can make these difficult to extinguish. Unfortunately, too, children without self-initiated learning processes and creative skills cannot use the enriched opportunities for cognitive exploration and creative experiment which pre-school centres characteristically provide.

It is, then, necessary to recognize the difference between teaching responsibilities which are largely preventive and facilitating, and those which require the reversal of negative trends in development, and the provision of compensatory help for pre-school children. Many experimental programs overseas have drawn attention to the need for more focused teaching help with similar problems (e.g. Klaus & Gray, 1968; Blank, 1968; Karnes, 1970). Rather than being highly selective over particular skills to be trained, in this project there has been intensive focus on certain general categories which, while stimulating progress in areas of retardation, has left room for individual variety in intellectual development. Also, cognitive attention has been engaged in dealing with immediate, personal experience, rather than in more specific preparation for academic learning.

Increasing demands on pre-school centres

Questions as to the effectiveness of group situations for certain aspects of learning serve as a reminder that attendance at a pre-school centre may not carry any more constant value than attendance at school, when it comes to early learning problems - although it may create less stress. But it needs to be clear that it is the effectiveness of the group setting for specific teaching tasks, and not of the teacher, which is in need of examination.

Pre-school centres, too, have other contributions to make to families. Given time and appropriate resources, a pre-school centre could develop a variety of teaching opportunities, including a home visiting program where teaching outside the group is helpful.

The opportunities for teaching and learning in a pre-school group are, however, very much influenced by the children enrolled. General demands on pre-school centres have been steadily increasing over the years, with a significant decrease in the professional support available, in any one centre or through the availability of advisory help. Psychological services available to pre-school centres are also minimal. In addition, the practice of enrolling two groups per teacher now means little time for the planning, preparation and study which allows teachers to create an educational setting, rather than merely one for extending children's experience.

The trend to press for enrolment of a proportion of children with handicaps in pre-school centres is already an increased demand on teachers' time for individual attention. While pre-school teachers will want, then, to cooperate over enrolments for Aboriginal children where possible, the extent to which they can actually assume responsibility for dealing with urgent educational needs may be much less than might be expected. Even if it is not possible to plan, at a general level, more effective ways of compensating for an absence of certain parental help, some more realistic appraisal of what can be handled in a pre-school group would appear to be important.

Without recognition of this, there could be unfortunate results. Planning might deal neither with providing effective compensatory help for children, nor with action towards assisting families towards changed home circumstances. Further, the educational and other contributions which could be made from the pre-school group might be missed by Aboriginal children, because they are offered at a point in development or cultural relationships which is inappropriate to previous experience, for both children and parents. The following guidelines may help at this stage.

Recommendation 6: that some form of sustained teaching and personal contact with Aboriginal children and their parents, at an individual and family level is made possible, before enrolment in a pre-school group is suggested or encouraged.

(A home visiting program may be appropriate, or some less personal meeting ground arranged for a start, as a way of getting to know children and parents outside a larger group situation; also of considering cultural issues in education.)

Recommendation 7: that care is taken not to communicate to Aboriginal parents that attendance in a pre-school group is necessarily helpful to a child, regardless of previous experience, current general state, or conditions at home.

(Instead of communicating behavioural expectations, opportunities are thought to be needed for parent-teacher communication on children's immediate needs and learning priorities, and how these are affected by parents' own experience and practical problems; decisions on how to provide for children can then be arrived at together, and the opportunity is left open for parents to consider, first, what they can manage to deal with independently.)

Recommendation 8: that teacher-family contact, allowing two-way communication, and support to parents in family roles be considered the main issue in pre-school education at present. (A variety of informal individual or small group activities of immediate use can then grow out of this effort.)

Discussion of the use of existing community facilities for children's education, or the planning of any additional ones on cultural grounds, could then proceed with increased awareness of the educational choices involved, and of the range of values, interests and problems of Aboriginal parents.

Admittedly, this position assumes some distinctions in child-rearing roles between home and community. Since these roles are not synonymous with those of teachers and parents, there is room for some fuller exploration here. Since what happens in a home situation is, however, certainly a prerogative of parents, contributions from teachers to existing problems can only be made as communication on a positive personal basis is developed, and parents are aware of some common concerns for children.

18.3 Suggestions about the nature of teacher preparation for developing contacts with families

Ideas about any necessary preparatory work with teachers can only grow out of some agreed on responsibilities, in relation to knowledge of the training and experience of those likely to be involved. In the present situation, it is difficult to know what educational work might develop, or what responsibilities might rest with various groups - or even to what extent opportunities might exist for Aboriginal/white contact. There does seem to be a need to re-think what approach might be made to pre-school work.

The following comments list areas in which teaching responsibilities, inherent in this project, have uncovered some need for further study and thought, in relation to the work undertaken to date.

1) Some re-structuring of the usual conceptual framework for thinking about pre-school education, in order to make this sufficiently flexible for work outside the familiar setting of pre-school centre, and to develop some clear professional structure for this.

2) Thinking out, clarifying questions concerning:

    a. interdisciplinary relationships, in relation to work with families

    b. the relative responsibilities of parents and teachers, as these involve informal learning or planned teaching

    c. points of difference and overlap between the concepts of "pre-school centre" and "pre-school education" in the context of issues in Aboriginal education

    d. the meaning of "respect for another culture" in educational work with Aboriginal families

3) Defining and studying further:

    a. earlier levels of educational progress than those usually encountered in pre-school groups in regular centres

    b. questions concerning intelligence and race, and available methods of measuring "intelligence" and/or educational progress at pre-school levels

    c. educational purposes and methods in work with Aboriginal parents and with parents whose educational experience may have been limited by circumstances

In most of these areas, the need seemed to be far more one of time for reflective examination of one's own thinking, knowledge, and attitudes, in relation to immediate work, than one of some existing body of understanding or information to be learned in advance, through formal courses. Seminar-type work sessions (not just discussion) seem appropriate ways of dealing with these needs. Some opportunity for preparatory discussion with others familiar with field work and local situations is considered important before starting work. Personal experience is seen to be needed, however, in order to make discussion or study of certain issues meaningful.

Since the number of teachers with experience and additional study qualifications is likely to be limited, some continuing provision for consultation on educational, psychological, and cultural questions is likely to be necessary. This would allow evaluation of field work and re-thinking of next steps. The flexibility which this retains, if allowed for at fairly frequent intervals, seems most important at present. Contacts and consultation through such seminar work would also help in defining what further information or study is relevant to immediate efforts in various areas.

While some priority in in-service work of this kind may need to be given to teachers intending to work, immediately, with Aboriginal families, it is considered that the outcome of any seminars possible would be more positive, and useful, if these allowed interaction between teachers working in a wider range of situations. Contacts across professional fields, and with persons working simply as community members, would also help in being sensitized to a variety of issues and viewpoints, while developing a sense of direction for professional work.

In the matter of communication with Aboriginal people on Aboriginal dimensions of problems, the range of differences even within this State needs to be given thought.

These suggestions for teacher preparation are made with awareness of some of the educational tasks which may need to be faced. Work in these directions would be additional to any study of Aboriginal cultures, languages, or history, appropriate to particular areas or appointments.

18.4 Practical facilities and resources found helpful in supportive work with Aboriginal and non-Aboriginal families in Victoria

If communication on early education is sought with teachers, by Aboriginal communities, the following provisions have been found necessary (though not always available) :

1) the salary of a qualified and experienced teacher

2) some independent form of transport, which houses a small selection of portable teaching materials and equipment, for work with individuals or small groups (e.g. a medium-sized station wagon - without official labels)

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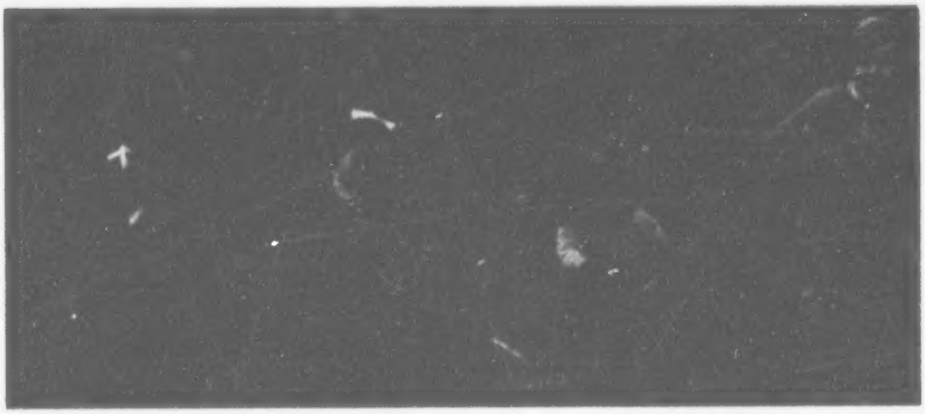
3) an allowance for equipment and running expenses, for the teacher's use

4) some temporary local base which provides office facilities for the teacher and a place where she may be contacted; a room suitable for teaching sessions with individuals or a few children at a time (approx.3-8) and for informal educational work with parents; enough outdoor play space for the same numbers, plus some access to toilet facilities.

Since one of the characteristics of work of this kind is its unpredictable qualities, and teaching sessions are not always possible in all homes, facilities need to be independent, if possible, from use by others. This allows them to be available at short notice or to be set up in advance.

Work with large groups such as those which might be enrolled in a regular mobile pre-school unit is not seen to be the need, although in some areas it may be necessary to begin to establish contacts at a more general group level with parents, since ready access to Aboriginal homes is not a privilege which should be expected at the outset of work. In this project's experience, more concentrated communication at a more personal level with both children and parents - even at less frequent intervals - is more helpful in both educational and cross-cultural terms.

The above suggestions for facilities do not mean that pre-school centres with less adequate buildings than those for the rest of the community are being described. The facilities needed are not those for peer-group experience, primarily. The different and more temporary nature of facilities suggested is partly a matter of the need for individual and small group work; partly due to the degree of mobility still operative for some Aboriginal families - and this is not just a question of numbers, since educational needs and practical circumstances change dramatically from one family to another; partly a matter of working very effectively towards a reduced need for special efforts to counteract adverse home conditions which limit parental help to children; and partly because both Aboriginals and non-Aboriginals involved in planning responsibilities may only be beginning to understand, or be able to communicate on, what provision may be needed for the education of Aboriginal Australians, or for other children and parents in a society which can accept and enjoy cultural difference.



IN CONCLUSION:

SOME SUGGESTED EMPHASES

. . . on the nature and content of communication
rather than on the organization of activities
and control of facilities and resources

. . . on opportunities to increase ability to control one's experience
and to understand the meaning of education
in this sense

. . . on creating home conditions which sustain educational processes
rather than on learning how to "teach" children

. . . on continuity of personal-professional contact with families

. . . on adult-child rather than peer-group interaction

. . . on recognizing the range of cultural and educational differences
between Aboriginal Australians

. . . on removing the separating label of "disadvantaged",
and the reasons for it

. . . on educational communication and behavioural freedom

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APPENDIX A.

TABLE 32: FAMILY VARIABLES AFFECTING NATURE OF EDUCATIONAL WORK POSSIBLE
(1969 - 1972 ENROLMENTS: N = 55 FAMILIES)

Additional variables	Swan Hill	Metropolitan
GROUP 1a : TWO-PARENT FAMILIES ACCESSIBLE TO SUSTAINED CONTACT (40%) *		
	N = 8	N = 14
Household size	4 - 11 people	4 - 10 +
No. children (family enrolled)	2 - 8 children	2 - 11
No. pre-school children (maximum during contact)	2 - 4 children	1 - 3
Average spacing between pre-school children	17 - 68 months	13 - 44 (Unknown: N = 3)
GROUP 1b : TWO-PARENT FAMILIES, CONTACT AFFECTED BY MULTIPLE PROBLEMS (11%)		
	N = 3	N = 3
Household size	7 - 25 + people	6 - 11
No. children	5 - 14	5 - 10
No. pre-school children	1 - 4	1 - 4
Average spacing	14 - 20	17 - 27
GROUP 2 : TWO-PARENT FAMILIES, NO PERMANENT HOUSING (4%)		
	N = 2	N = 0
Household size	15 people	
No. children	2 - 3 children	
No. pre-school children	2 - 3 children	
Average spacing	14 - 17 months	

* Percentages rounded to nearest unit

+ **Plus** frequent itinerants or extra boarders : Group 1a: N=5; Group 1b: N=1

(cont.)

TABLE 32 (cont.)

Additional variables	Swan Hill	Metropolitan
GROUP 3 : MARITAL STRESS OR FAMILY SEPARATION (20%)		
	N = 6	N = 5
Household size	4 - 15 + people	6 - 11
No. children	2 - 5 children	4 - 8
No. pre-school children	1 - 5 children	1 - 2
Average spacing	10 - 30 months	19 - 42
GROUP 4 : SINGLE MOTHERS, CHANGING PARTNERS & HOUSING (20%)		
	N = 9	N = 2
Household size	3 - 19 + people	2 - 6 +
No. children	2 - 6 children	? - 10
No. pre-school children	2 - 4 children	1
Average spacing	14 - 51 months	(unknown)

Notes: Family circumstances unknown: N = 3 (5%) in contact through other Metropolitan families.

Children enrolled distributed as follows:
Group 1a : 39%; Group 1b : 13%; Group 2 : 4%; Group 3 : 22%;
Group 4 : 19%; Family circumstances unknown: 3%

+ Plus frequent itinerants: Group 3: N=1; Group 4: N=3

Sources of information in Table 32: direct observation by field staff, or mothers' verbal reports.

APPENDIX B.

SUPPLEMENTARY NOTES FROM FIELD WORK

In the course of program contacts with Aboriginal families, much informal communication on significant issues occurred. This helped in immediate interactions. Since the content of such communication is confidential, it cannot be used in a report such as this. General statements of issues needing attention tend, however, to lose the impact which individual situations and personal experience hold.

These supplementary notes on field work are intended to illustrate some of the points made at a general level, and to place emphasis more on the experience of the Aboriginal people involved than on repercussions for a pre-school education program.

Two sets of notes are added here. The first set communicates information on the current state of Aboriginal/white interaction in the areas in which we worked. The second addition is a commentary which may help to indicate the meaning for adults of what has been referred to as "the absence of basic conditions for learning."

THE SOCIAL INTERACTIONS OF ABORIGINAL FAMILIES: NOTES FROM INTERVIEW RESPONSES

A few particular issues were selected for more planned attention in a short interview with mothers, carried out in 1972. Because this could only be done with a proportion of families, it seems more appropriate to present the information obtained as supplementary notes from field work, rather than formal interview data. There was, however, an attempt to gather comparable and accurate background information, across all available families, on a few particular variables of relevance to educational planning. Also, the reasons for no interview varied widely, on practical grounds mostly, (temporarily out of contact; verbal communication extremely limited; involved in solving an immediate crisis , not yet enrolled) - and families interviewed represented some very different backgrounds and circumstances. The following information may, then, be a useful start in understanding some current influences in the lives of Aboriginal families in these areas. By the time these interviews were carried out, it was possible to ask parents directly for information which helped in teaching, and in understanding Aboriginal problems in general, and to communicate to them these reasons for seeking it.

At Swan Hill, interviews were carried out by the Project Coordinator and in the Metropolitan program, by the pre-school teacher , following attention to some scientific safeguards necessary in obtaining accurate data from interviews. Those mothers interviewed responded positively to interview questions, on the basis of previously established communication; in spite of some problems of verbal expression, the following information was obtained.

(Notes were made in the mother's presence of the information given, with the comment that the interviewer wanted to remember what each person felt and said, since it was important to understand each mother's position. Responses were coded by the Project Coordinator.)

Contacts maintained with the wider Aboriginal community

With an interest in the degree of identification with the Aboriginal community, and in the extent to which a network of contacts within kinship groups were still operative for these families, the following questions were asked, after an introductory explanation about the reasons for the interview:

Questions:

* This year, have you visited any friends or relatives outside (the suburb or town of residence) ?
* Would they be Aboriginal or not Aboriginal ?
* Is there anyone else you would like to have seen ? In the country? In another State?

(The interview took place in the second half of the year.)

Responses: (Swan Hill: N = 11; Metropolitan: N = 14)

In both Swan Hill and Metropolitan programs, just over half the families interviewed had had visits to relatives or friends outside their own locality, within the current year (S.H.: 6 out of 11; Met.: 9 out of 14). In all cases except one (where identity was uncertain but thought to be Aboriginal) Aboriginal relatives were involved. In half the cases, non-Aborigines were also visited. No parents only visited non-Aborigines.

Of those who had not made visits out of their own town or suburb, four of the five Metropolitan families and three of the five from Swan Hill would like to have visited relatives, and would have done so except for lack of finance or transport. In the other three families, contact was not sought, parents preferring - or being too busy with - family activities. In one case, relatives themselves visited.

Contacts with neighbours or friends in area of residence

Re-housing of Aboriginal families, singly, within the general community, has been for many a very sudden change in social organization. Such action has increased practical opportunities for Aboriginal/white interaction. To what extent is there actual contact, and what is its nature? The following questions and responses relate to interaction with neighbours.

Questions:

* Would you have any contact with next door neighbours or not ?
* Who would have started that - who spoke first?
* What do you usually do together, talk about?
* Would there be any children next door ? (If yes) Do they play with yours or not? In their home or here?

Responses:

Approximately half the families interviewed in each program had friendly but passing contacts with neighbours (S.H.: N=5; Met.: N=8). This type of contact took the form of casual conversation, a greeting, or comments concerning children. Of the remaining families, a few had no contact or almost none (S.H.: N=4; Met.: N=2) and a few had more sustained and intimate interaction, involving visiting in each others' homes, cups of tea together, talk "about things that women talk about". (S.H.: N=2; Met.: N=4).

Most mothers could not remember who initiated contact; in most cases now it was a two-way affair. In half the cases where closer friendships operated, there had been an initial approach by white neighbours.

Contacts between Aboriginal and neighbouring white children (there were no near Aboriginal families in most cases) usually reflected the extent of adult interaction. Most of the contacts between children occurred out in the street. Where there was inter-home visiting between parents, children also played in alternative homes; where there was little or no adult contact, however, contact between children still tended to occur although this was away from the homes of the Aboriginal families (e.g. up the street, across the road).

The above notes present a factual picture only. Interactions between families reported by mothers cannot be interpreted just in cross-cultural terms. There were expressions of familiar variations in personal child-rearing methods (for instance - the extent of supervision of play) or in the company available (e.g. mostly older children around; only ones close are "too rough for mine" - or at the adult level, "she's a bit hard to get away from"). Even in the few cases of little or no contact, two quite different sets of variables appeared to be operative. On the one hand, problems of interpersonal relationships in Aboriginal families, obvious and disturbing to those living near, seemed to result in negative attitudes or rejection by neighbours and sometimes withdrawal of previous friendship at a time when there may have been most need for it. In other cases, Aboriginal mothers themselves avoided contact; extreme shyness, being "too ashamed" of the poverty and disrepair of the home, "not asking for trouble", and "not knowing what to say" were some representative comments.

Overall, only 6 of the 25 mothers interviewed had anything more than casual, passing contacts with nearby families. This, however, might be true of many families in general. Its significance rather depends on what other sources of contact with the wider Australian community were operative, and how mothers perceived the situation. A further question was asked.

Question: What about other friends in the area - are there people you visit ? Would they come to see you too, or not ?

Responses:

Answers to this question confirmed the personal isolation of the majority of Aboriginal families within the wider community, as far as any involvement in more than passing friendliness. Where there was also a one-parent situation, the sense of isolation increased. Visits to or by friends in the locality brought the number with more personal contact with non-Aborigines from 6 to 9; in two of these three instances, the involvement was one of obtaining supportive help. To what extent was this situation changed by contact with group activities ?

Participation in organized community groups

Question: * Do you belong to any organizations, anywhere at all? Any social groups? Church activities?

Responses:

No mothers in the Metropolitan program were current members of any formal organizations. For a few, there was occasional involvement in social functions run by community groups (e.g. R.S.L. and Aboriginal Advancement League), with which husbands had some contact. Several were interested in local football, but this still appeared to involve more casual contacts beyond the family.

At Swan Hill, about half the families indicated spasmodic involvement in one organized group in which there would have been opportunity for contacts outside the Aboriginal community - the school mothers' club; Church social groups; Salvation Army meetings; or C.W.A. Two mothers expressed interest in sporting activities, but were not playing any sport at the time of interviewing.

Summary

In general, the situation in both localities is one of casual interaction which is more friendly than not, but of very limited contact of a personal nature across cultural barriers. It is not suggested that this should necessarily be the expected outcome of physical assimilation. But how much it mattered to any one family is a question for further examination. In only one case was there any voluntary expression of interest in more active participation and more general acceptance. That this is not necessarily achieved by time alone is evident in this mother's concern for the increasing loneliness of her adolescent children in an urban setting. The absence of anyone to help her take preventive action at this stage seems to deserve attention.

There were some clues, from mothers' reports of their perceptions of the town or neighbourhood as generally friendly or unfriendly, that social discrimination had been experienced on occasions, in both country and suburban settings, and that some families had negative expectations in relation to acceptance by non-Aborigines. The general picture for this somewhat limited sample was, however, one which seemed more a lack of positive experience rather than one of latent hostility, at the level of personal interactions. The situation in both areas appeared very open to learning. This was rather in contrast to attitudes expressed in official communication.

COMMENTARY

. . . the needs of people appear to be falling between official programs

In spite of much which has been achieved as a result of increased public concern and Government action, somehow the most urgent needs of some Aboriginal families - those most in need of support - are not yet met. Some families remain in deep distress. Earlier reference in this report to the absence of basic conditions for human development and educational change expresses the problem from the teaching viewpoint. It remains, however, to communicate something more of the meaning of the situation as some Aboriginal families have been observed to experience it.

The really vital issue is something never evident in official reports, written at one point in time. It is knowledge of the cumulative experience over time of an individual which is the key to understanding. This, however, is not something which can be placed on public record. Perhaps the following glimpses of realities faced by different individuals will help to bring to life some of the general statements made in the body of this report (see Chap. 14), and the urgency of some coordinated action.

The personal combinations of sources of stress vary, from family to family; but the despair, hopelessness, and utter loneliness of some Aboriginal adults - the exhaustion produced by fighting a faceless enemy of conflicting requirements and negative expectations - shows in voices, posture, facial expressions and direct comments. But there is quite striking change evident, following periods of more relaxed home life and less active social rejection from both Aboriginal and white communities. Regardless of the extent of change possible, however, there are human obligations to be met.

Basic prerequisites . . .

> An Aboriginal mother and pre-school teacher sit talking during a pre-school session. On this day the group is relatively small, but there is a sound of busy activity and chatter. Three of this mother's five pre-school children are present. The others are home with relatives. The mother is trying to say that she would like to come more often with her children rather than sending the older ones without her. But at that point she is reduced to tears because, in her physically and emotionally exhausted state, the normal sounds of children playing are beyond the level of sensory stimulation which is bearable. She lives in the household of an extended family - there are several groups, each with several young children. This family organization has quite a different significance when operating in confined space, rather than on a river bank. The mother tries to explain that the children's noise is more than she can cope with - anxious that the teacher knows she values the pre-school program, that she notices the children's needs.

. . . the absence of chronic fatigue ?

Enquiries are made about the progress of a housing application. These uncover the fact that it has not been set in motion. The reason - it is not seen to be any use; it is "known" that the applicants will not be good tenants. This may solve one problem; but what of the family's ?

. . . .

There is a need to apply for a Court Order. The local office requires one to state one's problem and give personal details across a wide counter. There is some difficulty in hearing, one must speak a little louder. The room is full of others, waiting.

. . . .

One's home is intermittently invaded by police - unannounced and without search warrant - looking for suspects among the itinerant members of the household. Or you are removed in the midst of school activity by police officers, in front of peers, and taken into custody on charges of family neglect.

. . . the need for a positive self-image ?

There is help with much-needed housing. The situation is eased. An effort is made to buy beds, blankets. This makes it difficult to pay for groceries but one is managing. Then there is pressure for payment of rent - a new responsibility to assume. Budgeting is a new skill, still problematical. Who should be paid first ?

. . . .

There is unemployment, but work is finally found. Income is fixed but there is a sudden increase in rents. Arrears accumulate and there is an eviction order. Since there seems no solution, one tends to ignore the rent problem. It is suggested that the best way of solving the problem is to evict the husband and apply for regular maintenance. There is warmth in family relationships. The pre-school program is dependent on some family stability. The teacher tries to facilitate contact between those who need to deal with the rent problem. A plan of action results.

. . . .

You are away from home, helping a relative who has been left with young children. Other members of the family also need help. It is a difficult time - you are away a good deal. With several young children, time and energy are limited. The house appears uncared for, unoccupied, on several occasions when official visits were made. There have been some previous problems. An eviction order is served to quit by a certain date. The threat of eviction is a method of warning, used to communicate the expectation that responsibility is taken for care of homes and payment of rent. Since limited education has very real consequences, the notice is only partly understood. You find money, somehow, to move furniture out by the required date - from a home only acquired after years of waiting.

Now, literally homeless, you are vulnerable to police action on grounds of no fixed address. You might have asked for help, but you are proud and serious about efforts to meet the pressure for independent behaviour.

. . . the absence of psychological stress ?

It is the grape picking season. This is one chance to supplement finances needed to meet time payments, what you owe for food. Such debts accumulate in a week or two, during periods when a change in the husband's position requires a change in the source of pension for wife and children - from unemployment benefits to those operative during a period in gaol. There may be a lapse of weeks while the necessary forms are filled out and processed. A family can be without food during this time. There seems little provision for income during the transfer. The children miss the start of the school year, and some months of the pre-school program. Might there have been other solutions ?

. . . the need for sustained contact with a source of educational help ?

There is effort towards developing a mother's interest in her children's progress, more regular contact with school and pre-school program, and a feeling of achievement at being a little more in control of family events. There is much still to be done, but there is a growing sense of family identity, of progress. But one cannot do or learn everything at once. On other official grounds, one is seen responsible for physical neglect, and children are taken into custody without warning. Efforts by others to express the conflicting pressures and need to set priorities fail. There is seen to be a strict separation between responsibility for physical well-being and that for education.

. . . the need for acceptance - as a person, rather than a body or a mind ?

Such sources of conflict and stress are not limited to Aboriginal Australians; but their impact has a special significance here. Responsibility for these problems is seen to be shared by all Victorians. It is assumed that their existence is due to lack of awareness, and to the problems of change in administrative machinery, and not to lack of concern. It is not assumed that solutions would be easy, but rather that they are possible and within our hands.

There are a number of possible responses to a commentary such as this. One is to discount it. Another is just to feel distressed for those in difficulty. A third would be that of concern to understand what is happening to individuals caught between conflicting official requirements and policies, and of taking constructive action towards cooperative effort.

It seems the third response which is needed.

ATTITUDES OF PARENTS TO CONTINUATION OF PRE-SCHOOL PROGRAM

In both Swan Hill and Metropolitan programs, parents have been asked at intervals to express their feelings and thoughts about continuing teacher-parent contact and teaching sessions with children. Each time, there has been a strong request for maintaining the program, both for children and for parents themselves. (Reactions were obtained by the Project Coordinator, in the absence of the teacher concerned.)

Spontaneous comments indicate differing reasons and quite differing degrees of personal involvement, as with any pre-school program. It was intended to focus major study and teaching effort on some issues in adult education as a next stage. Uncertainty as to the future of work, and report-writing commitments, have limited development beyond an initial stage.

The following comments from parents, however, indicate some of the ways in which they see the children's program at present.

Indications that children had become a different stimulus for the mother:

> "It's easier to help them, they're interested, a bit more independent, will have a go at things."
>
> "When they come and tell me about what they've seen or they're doing, their faces are all lit up and happy and they want to tell you about it. I feel real good. I'm happy too. I didn't know they could be like that."

Observations of children's interest and enjoyment of teaching sessions and of interaction with the teacher:

> "He's been asking when you were coming back. They enjoyed all the things."
>
> "Oh, she really likes it. It's good that they don't fight over the things. They're always fighting."

Awareness of having learned something about helping children learn:

> "I noticed how she (the teacher) talks to the children - she asks them things. I never thought of doing that before."
>
> "I used to talk baby talk to __. I've listened to the teacher and she just picks the right words. He seems to understand what I say to him better."

Awareness of children's progress:

> "Oh, they look forward to it, learn things too, like colours and talking better."
>
> "It's really interesting to see them what they learn to do."
>
> "Well, I was thinking about that doing things for yourself - and you know, you could go on doing things for them for ever, couldn't you.

At the time of writing this report, parents have expressed a wish to go on from here, to maintain both programs.

APPENDIX C : School questionnaire

MONASH UNIVERSITY PRE-SCHOOL PROJECT:

Monash University is studying the general progress of children who have been enrolled in an experimental pre-school program, and of others who have not. Children from several schools are involved in the study.

Teachers are asked to furnish the following information CONFIDENTIALLY. It will be used in a report on the project in such a way that particular children, teachers, or schools cannot be identified.

TEACHER'S REPORT FORM

CHILD'S NAME ______________________

ADDRESS ______________________

BIRTH DATE ______________________

AGE NOW ________ YRS. ________ MTHS.

GRADE ______________________

TODAY'S DATE ______________________

ACADEMIC PROGRESS How is he/she coping with the following subjects this year?

	Very well	Adequately	Poorly
Reading	☐	☐	☐
Arithmetic	☐	☐	☐
Written expression	☐	☐	☐

SOCIAL BEHAVIOUR WITH CHILDREN (tick one box for each question)

1) Plays with others often, sometimes		☐	Barely, never ☐
2) Acts aggressively ☐	Does not hurt others	☐	Acts with thought for others ☐
3) Acts submissively ☐	Stands up for self	☐	

SOCIAL BEHAVIOUR WITH ADULTS

1) Makes friendly approaches to teacher ☐	Responds to teacher approaches but does not initiate contact ☐	Avoids teacher when possible ☐
2) Demands frequent attention from teacher ☐	Seeks some attention from teacher ☐	Seeks little attention from teacher ☐

TEACHER'S CONTACT WITH MOTHER Has teacher had contact with mother?

TYPE OF CONTACT? WHO INITIATED?	Mother	Teacher	
☐ Yes, casual conversation	☐	☐	(Tick all relevant boxes: if contact with other than mother, specify)
☐ Yes, on child's general progress	☐	☐	
☐ Yes, on child's problems	☐	☐	
☐ Yes, on parents' problems	☐	☐	
☐ No contact	☐	☐	

PARENTS' ATTITUDES TO SCHOOL (circle: Mother (M) Father (F) Both (M/F)

Interested, helpful	M	F	M/F	Antagonistic	M	F	M/F
Not interested	M	F	M/F	Unknown	M	F	M/F

LEARNING BEHAVIOUR AND ATTITUDES Tick one box (usual behaviour) for each question

1) Follows verbal directions:
☐ without difficulty
☐ with some difficulty
☐ with much difficulty

2) Puts effort into, attends to work:
☐ yes, voluntarily
☐ yes, when teacher reminds
☐ not even when teacher insists

3) Tackles new learning tasks:
☐ eagerly
☐ hesitantly
☐ very reluctantly

4) Persists when meets difficulty in work:
☐ of own accord
☐ when encouraged
☐ only when required

5) Listens to teacher giving information, explaining:
☐ yes, voluntarily
☐ yes, when encouraged
☐ no, little interest, difficulty in attending

6) Answers teachers questions on lesson content:
☐ readily
☐ only with persuasion
☐ rarely, never

7) Teacher finds speech:
☐ clear, easy to follow
☐ somewhat hard to follow
☐ very difficult to understand
☐ not known

8) Child investigates, asks questions about new things around the school (e.g. pictures, nature materials, events):
☐ yes, voluntarily
☐ yes, when attention drawn to these
☐ no, little interest, curiosity

ATTENDANCE Total absences _____ out of total school days this year ____

Reasons for absences:

THANK YOU FOR YOUR HELP IN COMPLETING THIS FORM. If you wish to add any further comments on this child, please use the blank sheet attached.